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November 26, 2003

Ms. Maria Franco-Spera
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Trenton, New Jersey 08625

RE: Groundwater Monitoring Report and Supplemental Groundwater Remedial Investigation Report - Ingersoll Rand Phillipsburg, Warren County, NJ (ENSR Project Number 03710-156)

Dear Maria,

Enclosed, please find three copies of the November 2003 *Groundwater Monitoring Report and Supplemental Groundwater Remedial Investigation Report*. Please note that one copy of the laboratory data reports have also been attached along with the requisite electronic data deliverable. Further, although ENSR received NJDEP comments on its November 2002 Groundwater Remedial Investigation Report late in October, NJDEP's comments have not been specifically addressed in the report contained herein. ENSR will prepare a separate response to NJDEP's October comment letter in January 2004.

As always, if you have any questions or comments regarding this submission, please feel free to call me.

Sincerely,

Gregg R. Micalizio
Senior Project Specialist

Steven J. Surman
Senior Project Manager

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enclosures:

cc: Dave Sordi (IR)
Aaron Kleinbaum (IR)
File 03710-Pburg-8.3

**Ingersoll Rand Company
Woodcliff Lake, New Jersey**



**Annual Groundwater Monitoring
Report and Supplemental
Groundwater Remedial
Investigation Report**

**Volume I of II
Text, Tables, Figures, and
Appendices**

**ENSR Corporation
November 2003
Document Number 03710-156-GWM03**

**Ingersoll Rand Company
Woodcliff Lake, New Jersey**



**Annual Groundwater Monitoring
Report and Supplemental
Groundwater Remedial
Investigation Report**

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**ENSR Corporation
May 2003
Document Number 03710-156-GWM03**

TABLE OF CONTENTS

TABLE OF CONTENTS.....	i
LIST OF APPENDICES.....	iii
LIST OF TABLES.....	iv
LIST OF FIGURES.....	v
1.0 INTRODUCTION.....	1-1
1.1 BACKGROUND.....	1-1
1.2 OBJECTIVE.....	1-2
2.0 TECHNICAL OVERVIEW.....	2-1
2.1 WELL SEARCH.....	2-1
2.1.1 Address Match.....	2-1
2.1.2 Well Block/Lot Search.....	2-2
2.1.3 Monitoring Well Certification Form B Search.....	2-2
2.2 GEOPHYSICAL INVESTIGATION/WELL INSTALLATION.....	2-2
2.2.1 Well Installation.....	2-3
2.2.2 Geophysical Logging.....	2-3
2.3 GROUNDWATER MONITORING.....	2-4
2.3.1 Groundwater Elevation and LNAPL Thickness.....	2-4
2.3.2 LNAPL Fingerprinting.....	2-4
2.3.3 Groundwater Sampling.....	2-4
2.4 NATURE OF CONTAMINATION AND CLEANUP CRITERIA.....	2-8
2.5 RELIABILITY OF DATA.....	2-8
2.5.1 Well Search.....	2-8
2.5.2 Geophysical Data.....	2-8
2.5.3 LNAPL Fingerprint.....	2-8
2.5.4 Groundwater Analytical Data.....	2-9
3.0 RESULTS.....	3-1
3.1 WELL SEARCH.....	3-1
3.2 WELL INSTALLATION.....	3-1
3.3 GEOPHYSICAL INVESTIGATION.....	3-2
3.4 LNAPL FINGERPRINTS.....	3-3
3.5 GROUNDWATER ELEVATION GAUGING RESULTS.....	3-3
3.6 GROUNDWATER SAMPLE ANALYTICAL RESULTS.....	3-4
3.6.1 Passive Diffusion Bag Results.....	3-5
3.6.2 Conventional Sample Results.....	3-8
3.6.3 Low Flow Sample Results.....	3-10

4.0 CONCLUSIONS AND RECOMMENDATIONS.....	4-1
4.1 WELL SEARCH	4-1
4.1.1 Conclusions.....	4-1
4.1.2 Recommendations	4-1
4.2 WELL INSTALLATION.....	4-1
4.2.1 Conclusions.....	4-1
4.2.2 Recommendations	4-1
4.3 GEOPHYSICAL LOGGING	4-2
4.3.1 Conclusions.....	4-2
4.3.2 Recommendations	4-2
4.4 LNAPL	4-2
4.4.1 Conclusions.....	4-2
4.4.2 Recommendations	4-2
4.5 GROUNDWATER INVESTIGATION AND DATA ANALYSIS	4-2
4.5.1 Conclusions.....	4-2
4.5.2 Recommendations	4-3
5.0 REFERENCES	5-1

LIST OF APPENDICES

APPENDIX A	Well Installation Information
APPENDIX B	Landfill Disruption Permit
APPENDIX C	Variance Request
APPENDIX D	Mid-Atlantic Geophysical Report
APPENDIX E	Laboratory Analytical Data Reports and EDD
APPENDIX F	Groundwater Purging and Sampling Logs

LIST OF TABLES

TABLE 1	Well Search Summary
TABLE 2A – 2E	Quarterly Gauging Summary July 2002 through July 2003
TABLE 3A – 3B	Sample Summary for October 2002 and April 2003
TABLE 4	Summary of Passive Diffusion Bag (PDB) Analytical Results October 2002 and April 2003
TABLE 5	Summary of Groundwater Analytical Results for October 2002 and April 2003: VOCs
TABLE 6	Summary of Groundwater Analytical Results for July 2003: VOCs
TABLE 7	Summary of Groundwater Analytical Results for October 2002 and April 2003: Metals

LIST OF FIGURES

FIGURE 1	Site Location Map
FIGURE 2	Site Plan with Monitor & Recovery Well Locations
FIGURE 3	Initial Plotting of Well Search Locations
FIGURE 4	Revised Search Well Locations
FIGURE 5	Groundwater Contour Map – July 2002
FIGURE 6	Groundwater Contour Map – October 2002
FIGURE 7	Groundwater Contour Map – January 2003
FIGURE 8	Groundwater Contour Map – April 2003
FIGURE 9	Groundwater Contour Map – July 2003
FIGURE 10	Summary of Groundwater Analytical Exceedences: Organic Compounds
FIGURE 11	Summary of Groundwater Analytical Results: Metals

1.0 INTRODUCTION

On behalf of Ingersoll Rand Company (IR), ENSR has been conducting groundwater remedial investigative activities at the IR facility located in Phillipsburg, New Jersey (Site) as per the New Jersey Department of Environmental Protection (NJDEP) approved Groundwater Remedial Investigation Work Plan (GW-RIWP) and the recommendations included in the November 2002 Groundwater Remedial Investigation Report (GW-RIR). Comments concerning the November 2002 GW-RIR received in a letter dated October 28, 2003 from the NJDEP will be addressed in January 2004. The site is shown on the USGS 7.5-minute Topographic Quadrangle Map for Easton, PA-NJ included as Figure 1. This 2003 Groundwater Monitoring Report and Supplemental GW-RIR describes the activities completed at the Site between July 1, 2002 and July 31, 2003. These activities include:

- Supplemental Well Search;
- Well Installation;
- Geophysical Logging; and
- Groundwater Monitoring.

This report has been prepared in accordance with the March 14, 1994 Administrative Consent Order (ACO) between the State of New Jersey and IR (which is being administered by the NJDEP Office of Brownfield Reuse) and the 2003 Technical Requirements for Site Remediation (TRSR) N.J.A.C. 7:26E.

1.1 Background

Ingersoll-Rand began facility construction in 1903 and underwent various expansions and additions throughout the following 70 years. According to previous reports, the facility produced products such as pumps, turbo equipment, air and gas compressors, rock drills, and mining equipment. The facility also maintained an active iron and steel foundry onsite, which was operated to process the raw materials for manufacturing operations. Since 1973, facility operations have been declining. Restructuring activities resulted in closing or moving of almost all previous facility operations. Currently, the only activities conducted on site is pump manufacturing and associated activities by FlowServe, Inc. who leases portions of the property from IR. Various unused buildings utilized in former manufacturing processes are vacant or have been demolished. A detailed history along with historic site plans is provided in the June 30, 1994 Draft Remedial Investigation Work Plan (DRIWP). A current site plan is included as Figure 2.

Groundwater investigations at the site began voluntarily by Ingersoll-Rand as early as the mid-1970s when light non-aqueous phase liquid (LNAPL) was discovered on the groundwater table. Subsequent investigation identified a plume of floating product at the site. A detailed background of investigative activities was provided in the 1994 DRIWP and modified by the November 2002 GW-RIR.

1.2 Objective

Based on the February 2002 GW-RIWP and the results of the comprehensive round of groundwater sampling conducted in April 2002 and reported in the November 2002 GW-RIR, the quarterly gauging and semi-annual sampling program will provide additional information to:

- Confirm and/or establish horizontal and vertical delineation of LNAPL and dissolved-phase impacts;
- Assess locations in which additional data is required if any (i.e., proposed well locations);
- Determine trends in product thickness and dissolved-phase concentrations at individual wells and over the entire site;
- Assess potential sources of LNAPL and dissolved-phase impacts; and
- Verify well locations of potential offsite receptor wells identified in the 2002 Well Search.

The remaining sections of the report are structured as follows:

- 2.0 Technical Overview
- 3.0 Results
- 4.0 Conclusions and Recommendations

2.0 TECHNICAL OVERVIEW

Semi-annual monitoring activities have been conducted in accordance with ENSR's February 2002 GW-RIWP, the February 2002 Quality Assurance Project Plan (QAPP), the Technical Requirements for Site Remediation (N.J.A.C.7:26E), the May 1992 Field Sampling Procedures Manual, and the 1997 SRP article "The Low Down on Low-Flow". Based on the GW-RIWP, and recommendations of the GW-RIR the following activities have been conducted between July 2002 and July 2003.

- Verification of previously reported well search locations for potential receptor wells,
- Installation of new groundwater monitoring wells,
- Down-hole geophysical logging of the new wells,
- Quarterly product thickness and water level gauging of all site wells, and
- Semi-annual groundwater monitoring of up to 45 site wells using conventional purging and sampling, low flow purging and sampling, and/or passive diffusion bag sampling,

The following subsections discuss the methods employed to conduct these activities.

2.1 Well Search

Due to inaccuracies noted in the Bureau of Water Allocation records for the locations of wells reported in the 2002 Well Search, the GW-RIR recommended attempting to correct these addresses and verify the locations of any potential receptor well. The initial mapping of monitoring wells based on the Bureau of Water Allocation Records is included as Figure 3.

To reduce the total amount of wells to be corrected, ENSR removed from consideration all IR-owned wells (as these locations are already known) as well as all soil boring permits as these are not considered potential receptors. To correct the locations of the remaining wells (e.g., potable wells, industrial wells, monitoring wells, recovery wells, etc.), ENSR attempted using an address matching script in ArcView GIS 3.2 to locate the property at which the identified wells may be located. Additionally, ENSR attempted to acquire lot and block information as well as Monitoring Well Certification Form B for select wells to verify or correct the locations provided by the Bureau of Water Allocation.

2.1.1 Address Match

Based on a review of the Well Records provided with the Bureau of Water Allocation Well Search as well as the electronic summary report, address information was reviewed for all potential receptor

wells. Address information along with other pertinent details were tabulated and run through an address rematch script¹ in ArcView GIS v.3.2.

Address information was matched using a geo-referenced shape file of all the streets in Warren County, NJ (U.S Census Bureau - TIGER/line files, 2002). Distances from the site were estimated by comparison by buffers created at 0.25-miles, 0.5-miles, 0.75-miles and 1-mile from the site boundary. Table 1 is a revision of the previously submitted Well Search Summary table incorporating changes derived from the address matching script. Figure 4 illustrates the revised well locations for those wells remapped using address matching.

2.1.2 Well Block/Lot Search

Since many well records did not have sufficient address information for the address matching script described above, additional correction/verification was necessary. Note that, many of the Well Records indicated Block and Lot, information an attempt was made to map wells based on this information. However, because the wells were spread out over an area covering many square miles over multiple towns, attempting to gather all of the associated tax maps was not attempted. ENSR did make inquiries to each town's tax assessor to determine the potential availability of electronic-versions of the tax maps. However, electronic versions were not available and no Block/Lot location verification was completed.

2.1.3 Monitoring Well Certification Form B Search

During well installation under the NJDEP Site Remediation Program (SRP), a survey location of each well is recorded on a Monitoring Well Certification Form B (Form B). The Form B for each well is located within a specific case file within the NJDEP SRP. However, each well location must be requested separately by an Open Public Records Act (OPRA) File Review Request using the specific NJDEP case numbers. Since the original Well Search indicated approximately 250 monitoring wells within one-mile of the site, ENSR will not consider such large file review request until other avenues of location correction/verification have been exhausted.

2.2 Geophysical Investigation/Well Installation

Based on the November 2002 GW-RIR, ENSR recommended the installation of eight wells to confirm delineation of chlorinated organic compounds to the property boundaries and to more clearly delineate LNAPL extent in the vicinity of the old landfill.

¹ The author of the script, Dave Gehr used avenue language in the address rematch script design. This script is available for download at <http://arcscrips.esri.com/details.asp?dbid=12372>.

2.2.1 Well Installation

Between June 9, 2003 to July 3, 2003 a total of eight new monitoring wells (MW's 46 to 53) were installed at the locations shown on Figure 2. Well installation was completed by Lutz Drilling (Linden, NJ) using an Ingersoll-Rand T3W air rotary drill rig under supervision of a New Jersey licensed well driller (Carmine DeCorso, NJ-Lic #MW 0024432) and an ENSR geologist. Well logs and Monitor Well Construction Diagrams are included as Appendix A.

All eight monitoring wells were constructed using six-inch diameter steel casing which was grouted at least 10 feet into competent bedrock. Two of the monitoring wells, MW-52 and MW-53, which were installed in the Old Landfill (AOC 29), were constructed within an extra exterior 10-inch steel casing to prevent potential impacts to the well caused by the material in the Old Landfill. These well installations were conducted in accordance with the Landfill Disruption Permit issued by the NJDEP Division of Solid Waste. A copy of the Landfill Disruption Permit Approval is included as Appendix B. One additional well (MW-49), located at the southeast border of the site, was constructed using ten-inch exterior steel casing due to hole collapse issues near the surface.

All eight monitoring wells were completed with an open borehole construction to depths ranging from 55 feet to 170 feet. Construction was completed in accordance with the variance from NJDEP Bureau of Water Allocation. A copy of the variance request is included as Appendix C.

Upon completion each well was surveyed on July 29, 2003 by Borbas Surveying and mapping per NJDEP requirements. Monitoring well Form B documents were completed and are included in Appendix A.

2.2.2 Geophysical Logging

Down-hole geophysical logging was conducted on seven of the eight new wells installed at the site as MW-51 collapsed immediately after installation. Mid-Atlantic Geosciences, Inc. conducted the down-hole geophysical logging on July 17, 2003. Geophysical logging was completed by lowering a three-arm caliper and optical televiewer (OPTV) down the well casing and through the length of the open borehole of the well. Data was acquired from each probe in real-time and saved to an on-site computer. Final logs are included in Mid-Atlantic GeoScience's July 2003 Results of Downhole Geophysical Logging and TV Surveys, Ingersoll-Rand, Phillipsburg, which is included as Appendix D.

2.3 Groundwater Monitoring

2.3.1 Groundwater Elevation and LNAPL Thickness

As discussed in the GW-RIWP and the GW-RIR, ENSR concluded monthly gauging operations and began quarterly gauging of Site wells in April 2002. ENSR conducted quarterly gauging activities on July 29, 2002, October 17, 2002, January 27, 2003, April 22, 2003, and July 21, 2003.

Gauging was conducted using a dedicated interface probe and water level indicator using methods described in the 1992 NJDEP Field Sampling Procedures Manual (FSPM). All gauging data was recorded in a dedicated field notebook, checked to assure QA/QC standards as per the 2002 QAPP, and was imported into the groundwater database as described in the GW-RIWP. LNAPL thickness and groundwater elevation tables were generated from the database and groundwater contour maps were produced for continued trend analysis. Tables 2A through 2E present the groundwater elevation and product thickness data from the July 2002, October 2002, January 2003, April 2003, and July 2003 gauging events, respectively.

Using the groundwater elevation data, groundwater contours were generated using Golden Software's Surfer[®] version 7.0 and overlain on the site map. Groundwater Contour Maps for July 2002, October 2002, January 2003, April 2003, and July 2003 are provided as Figures 5 through 9. Wells at which LNAPL was encountered are identified on these figures and observed LNAPL thickness is reported. Due to the irregularity of LNAPL thickness within the fractured bedrock aquifer at the site, product thickness isopleths have not been generated.

2.3.2 LNAPL Fingerprinting

On October 2, 2002 a LNAPL sample was collected from monitoring well MW-05 using a dedicated polyethylene bailer, which was lowered to the groundwater table using a Teflon[®]-coated stainless steel cable. Any water collected was removed from the bailer and the LNAPL was transferred to laboratory supplied glassware. The samples were submitted to STL-Edison under standard chain of custody procedure for fingerprint analysis and product typing. STL-Edison transferred the samples to Texas Oil Tech, Inc. of Houston, TX for analysis. Laboratory analytical reports are included in Appendix E.

2.3.3 Groundwater Sampling

During the October 2002 sampling event, to assess the vertical and horizontal extent of dissolved-phase groundwater impacts, 17 wells were sampled using passive diffusion bag (PDB) samplers deployed at multiple depths within each well; 11 wells were sampled using conventional purging and sampling methods; and 8 wells were purged using low flow methods as previous sampling efforts induced flow of LNAPL into the wells. During the April 2003 sampling event, 15 wells were sampled using passive diffusion bag (PDB) samplers deployed at multiple depths within each well; 20 wells

were sampled using conventional purging and sampling methods; and 2 wells were purged using low flow methods as previous sampling efforts induced flow of LNAPL into the wells. During the July 2003 sampling event, seven of the eight new wells were sampled using conventional purging and sampling methods.

Selection of wells are based on data needs including, but not limited to, determining and/or maintaining horizontal and vertical delineation, assessing dissolved-phase impacts, and assessing potential source areas.

Wells at which PDBs were deployed were selected based on previous exceedences of one or more chlorinated VOCs. Deployment depths for PDBs were determined by reviewing fracture locations reported on boring and/or drilling logs, well construction details, and/or geophysical data from the 2002/2003 groundwater investigation.

Wells at which samples were collected by conventional techniques were selected to maintain horizontal delineation of groundwater impacts at the site. To reduce the total number of wells used in horizontal delineation, monitoring wells were grouped by proximity into groups of two, three, or four and assigned a number indicating preferential sampling sequence. If the preferred well was inaccessible do to the presence of a product recovery system, LNAPL, or other sampling limitation, then the next well in the group was evaluated in the field for potential sampling. At least one well from each group was sampled during each field event.

Groundwater samples collected for metals analysis were collected at locations which previously illustrated exceedences of one or more metals and turbidity above 50 NTU, during the October 2002 event and were re-sampled in April 2003 for result verification.

Various well locations that were scheduled to be sampled in October 2002 but due to the presence of LNAPL samples could not be collected were attempted in April 2003 using low-flow sampling methods in an effort to assess the dissolved-phase groundwater quality in the vicinity of the LNAPL plume.

A sample summary is included as Table 3A and 3B for the October 2002, April 2003, and July 2003 sampling event, respectively. The following subsections detail the specific procedures used during these sampling events.

2.3.3.1 Passive Diffusion Bag Sampling

In attempt to characterize the vertical stratification of dissolved-phase constituents, ENSR sampled 17 wells in October 2003 and 15 wells in April 2003 using PDB samplers at multiple depths within each well. The deployment depth for each well that was sampled using PDB samplers is detailed in Tables 3A and 3B. The PDBs were installed on October 1, 2002, October 2, 2002, and April 9, 2003 using the methods described in the *User's Guide for Polyethylene-Based Passive Diffusion Bag Samplers to*

Obtain Volatile Organic Compound Concentrations in Wells (USGS, 2001). Specifically, PDBs were field-filled with laboratory-grade, analyte free, deionized water supplied by STL-Edison and were hung on polypropylene rope. Each rope was labeled with the corresponding well identification number and rings were placed at the pre-selected deployment depths prior to field mobilization. The PDB sample string was hung from an eyehook installed on the steel casing and left to equilibrate with the ambient well water for approximately 2-weeks. Samples were collected on October 15, 2002, October 16, 2002, and April 23, 2003 by pouring the water from each PDB into laboratory supplied glassware. Samples were labeled with the well ID appended with and a letter code corresponding to the depth that the PDB was deployed, the sample date and time, and the analysis requested. Samples were then placed in an ice-filled cooler to reduce sample temperature to approximately 4° Celsius and were submitted under standard chain of custody procedures to STL-Edison for analysis of volatile organic compounds with a library search of the 10 largest unidentified peaks (VOC+10) via EPA Method 624. Laboratory analytical data reports are included in Appendix E.

2.3.3.2 Conventional Groundwater Sampling

After completion of PDB sample collection, a conventional sampling program was conducted from October 21, 2002 through October 24, 2002, from April 24, 2003 through May 5, 2003, and from July 22, 2003 through July 25, 2003 in an effort to assess horizontal boundaries of the dissolved-phase plume. In October 2002, 11 wells, in April 2003, 20 wells, and in July 2003, seven wells listed in Table 3A and 3B, were sampled as per the methods described in the NJDEP FSPM (NJDEP, 1992). Specifically, the following was conducted.

Using a two or three-inch stainless steel Grundfos® pump and dedicated polyethylene tubing, the pump was lowered to approximately 10 feet below the water table prior to commencement of purging. Based on the drawdown of water during purging, the pump was lowered accordingly. Purge water was pumped through a water quality meter and water quality parameters were recorded at the beginning and end of the purge. Groundwater quality parameters including temperature, pH, conductivity, dissolved oxygen, turbidity, and oxidation-reduction potential, were recorded in field logs and dedicated field notebooks and transposed to electronic Groundwater Purging and Sampling Logs which are included in this report as Appendix F.

Upon completion of purging approximately three-well volumes, a dedicated weighted Teflon® bailer was used to collect groundwater samples. Metal samples were filtered by pouring directly from the bailer into a dedicated polyethylene bottle and filtered through a dedicated 45-micron filter into the laboratory supplied glassware preserved with nitric acid. Other samples were poured directly from the bailer into laboratory supplied glassware and labeled with sample ID, date and time collected, requested analysis, and samplers initials. Samples were then placed in an ice-filled cooler to reduce the sample temperature to approximately 4° Celsius and submitted to STL-Edison for analysis of one or more of the following compounds:

- Volatile organic compounds with a library search of the 10 largest unidentified peaks (VOC+10) via EPA Method 624,
- Arsenic, chromium, and lead via EPA Method series 200 (total and field filtered).

Laboratory analytical data reports are included in Appendix E.

2.3.3.3 Low Flow Groundwater Sampling

Low-Flow groundwater sampling was conducted from October 28, 2002 to October 30, 2002 and April 28, 2003 to April 29, 2003 in accordance with NJDEP *Low-Down on Low Flow* (SRP News, vol.9 no.3) as well as USEPA's *Low-Flow (Minimal Drawdown) Ground-Water Sampling Procedures* (EPA, 1996). Specific procedures employed are as follows.

A 2-inch diameter stainless steel Grundfos® submersible pump was lowered to a pre-selected depth determined by selecting a possible water bearing fracture as identified by geophysical logging or the drilling log as well as results from previous sampling events at each monitor well location. Dedicated polyethylene tubing was used to connect the pump to a Horiba® U-22 water quality meter with an in-line, flow through cell. Groundwater was purged at each monitor well location at approximately 1-gallon per minute or less and water quality parameters were collected at approximately 3-minute intervals. Water quality parameters were recorded on field logs and dedicated field notebooks later transcribed to an electronic version. The groundwater purging and sampling logs are included in Appendix F.

Upon stabilization of groundwater quality parameters, samples were collected directly from the dedicated polyethylene tubing (prior to entering flow-through cell). Samples were poured directly from the polyethylene tubing into laboratory supplied glassware and labeled with sample ID, date and time collected, requested analysis, and samplers initials. Filtered metals samples were pumped directly through a dedicated 45-micron filter into the laboratory supplied glassware preserved with nitric acid. Samples were then placed in an ice-filled cooler to reduce the sample temperature to approximately 4° Celsius and submitted to STL-Edison for analysis of one or more of the following compounds:

- Volatile organic compounds with a library search of the 10 largest unidentified peaks (VOC+10) via EPA Method 624,
- Arsenic, chromium, and lead via EPA Method series 200 (total and field filtered).

Laboratory analytical data reports are included in Appendix E.

2.4 Nature of Contamination and Cleanup Criteria

Contaminants historically identified in groundwater samples collected from the site wells include chlorinated volatile organic compounds, and metals – specifically arsenic, chromium, and lead. Additionally, LNAPL was identified on the groundwater surface at several well locations across the site. The source of groundwater impact at the site appears to be from various historical operations including incidental spills and leaks. For purposes of this report, compound concentrations are being compared to the NJDEP Groundwater Quality Standards (N.J.A.C. 7:9-6), the interim specific groundwater cleanup criteria, and the interim generic groundwater cleanup criteria to assess the extent of impact and make recommendations for further action.

2.5 Reliability of Data

This section describes reliability of all field and laboratory derived data collected from July 2002 to July 2003.

2.5.1 Well Search

Aside from the noted inaccuracies of the Bureau of Water Allocation well location records, other factors may affect the reliability of corrected location data. Specifically, ENSR has relied on the information provided in the Well Records to provide the NJ-Atlas coordinates of the well, installation address of the well, block and lot, well use, etc. These records are submitted by the well installation contractor and may not have been checked for accuracy. Additionally, geo-referencing of address locations is based on a mathematical interpolation of an address range assigned to each TIGER line file line-segment (i.e., road segment). As such, this method does not take into account the potential variability in address locations on any given street.

2.5.2 Geophysical Data

There are potential issues that may have effected the accuracy of the down-hole geophysical data. The diameter of the well has the potential to affected the clarity of the optical televiewer log. Larger well diameters and/or turbid water reduced light intensity and diminished visibility of structural features and could have inhibited the fracture identification conducted electronically by Mid-Atlantic Geophysics. This was notable in monitoring well MW-48 and an acoustic televiewer was used to compensate for the reduced visibility.

2.5.3 LNAPL Fingerprint

Texas Oil Tech performed the composite breakdown of the sample on a gas chromatograph/mass spectrometer and preformed a library search using the Wiley 138 Library, which contains

approximately 138,000 products. Sample identification was completed with an approximate percentage-based match with two products within the library. These products, may or may not be the same as the products which have historically been used at the site.

2.5.4 Groundwater Analytical Data

STL Edison performed the analysis in accordance with EPA-approved analytical protocols for methods 418.1 (TPHC), 624 (VOCs), 6010B (arsenic), and 200.7 (chromium and lead) under the laboratory's NJDEP certification. Analytical results were reviewed to assess accuracy and precision. Based on a review of the laboratory non-conformance summaries and quality assurance/quality control (QA/QC) data, no data quality issues were identified. Non-conformances are summarized in Table 3A and 3B and nonconformance reports are included in the laboratory data reports found in Appendix E.

A review of the quality assurance/quality control sample analytical results for October 2002 (i.e., field and trip blanks) indicate that only 1,1-dichloroethene (3.1 ug/L) and one tentatively identified compound (TIC) (25.0 ug/L) was detected in the field blank associated with the PDB samples. No VOCs were detected in the field or trip blanks for conventional sampling results. No metals were reported in the field blanks.

A review of the quality assurance/quality control sample analytical results for April 2003 (i.e., field and trip blanks) indicate that only methylene chloride (1.5 ug/l) was detected in the trip blank and 1,1-dichloroethene (7.1 ug/L), toluene (0.2 ug/L), and one TIC (29.0 ug/L) were detected in the field blank associated with the PDB samples. No VOCs were detected in the field or trip blanks for conventional sampling. No metals were reported in the field blanks.

A review of the quality assurance/quality control sample analytical results for July 2003 (i.e., field and trip blanks) indicate that no VOCs were detected in the field blanks or trip blank for conventional sampling. No TPHC was reported in the field blanks.

Based on the above, the data reported appears to be representative of site conditions and are acceptable for use and comparison.

3.0 RESULTS

3.1 Well Search

Based on the address data from the Bureau of Water Allocation Well Records and the latest TIGER census data, locations of 56 of the wells with address information were corrected. This represents approximately 21 percent of the 262 wells identified in the 2002 Well Search. Figure 4 depicts the revised locations of the 56 wells.

As previously discussed, further correction could not be completed using the lot and block information due to the inaccessibility of electronic tax maps for the area; and too many uncorrected monitoring wells remained to make an OPRA Records Review Request for Form Bs for each of these wells.

3.2 Well Installation

Between June 9, 2003 to July 3, 2003 a total of eight new monitoring wells (MW's 46 to 53) were installed at the locations shown on Figure 2. As previously discussed, all eight monitoring wells were constructed using six-inch diameter steel casing which was grouted at least 10 feet into competent bedrock. Two of the monitoring wells (MW-52 and MW-53) were constructed within an extra exterior 10-inch steel casing due to their location in the Old Landfill. One additional well (MW-49) was constructed using ten-inch exterior steel casing due to hole collapse issues near the surface. All eight monitoring wells were constructed using open borehole construction in accordance with a variance received from NJDEP Bureau of Water Allocation (Appendix C). The following describes the final construction specifications of each well. The well logs and construction forms are included as Appendix A.

- **MW-46** – Six-inch steel casing was set at 45 feet below ground surface (bgs), with a 2.75 foot stick up and an open hole to 180 feet. There appears to be a partial collapse to approximately 120 feet.
- **MW-47** – Six-inch steel casing was set at 23 feet bgs, with a 2.12 foot stick up and an open hole to 165 feet.
- **MW-48** – Six-inch steel casing was set at 23 feet bgs, with a 2.20 foot stick up and an open hole to 133 feet.
- **MW-49** – Ten-inch steel casing was set at 18 feet bgs and a six-inch steel casing was set at 38 feet bgs, with a 1.75 foot stick up and an open hole to 55.7 feet.
- **MW-50** – Six-inch steel casing was set at 58 feet bgs, with a 1.80 foot stick up and an open hole to 156 feet.

- **MW-51** – Six-inch steel casing was set at 45 feet bgs, with a 1.53 foot stick up and an open hole to 155 feet. The open hole collapsed in to approximately 90 feet.
- **MW-52** – Ten-inch steel casing was set at 23 feet and a six-inch steel casing was set at 58 feet bgs, with a 2.05 foot stick up and an open hole to 170 feet.
- **MW-53** – Ten-inch steel casing was set at 55 feet and a six-inch steel casing was set at 72 feet bgs, with a 3.50 foot stick up and an open hole to 160 feet.

3.3 Geophysical Investigation

The geophysical investigation conducted in July 2003 by Mid-Atlantic Geosciences yielded a substantial amount of detailed information regarding the subsurface of the Ingersoll-Rand site. The objective of the survey was to obtain accurate well construction information, define potential water bearing fractures, and determine fracture orientations. The results, combined with the results from the April 2002 investigation, show a complex system of fractured dolomite with an average strike of N86.1 degrees, a dip azimuth of N155 degrees and a dip angle of 42.5 degrees. Bedrock fractures were observed above and below the water table. A copy of Mid-Atlantic GeoScience's geophysical report is included as Appendix D. Pertinent results from the wells analyzed are listed below.

- **MW-46** – The most likely water-producing feature in MW-46 occurs at 113.6 and 114 feet below top of casing. The large open fracture at the bottom of the well has created an unstable environment, therefore the OPTV log was terminated before reaching the reported total depth of 180 feet.
- **MW-47** – Numerous hairline fractures were identified from 100 to 110 feet below top of casing. One open, possible water producing, fracture was measured with the caliper at 138 feet with a diameter 11 inches.
- **MW-48** – Due to extremely turbid conditions of MW-48 the output from the OPTV was not conclusive and an acoustic televiewer was deployed to gather more details. Discontinuous open fractures were identified at 95 to 96 feet below the top of the casing, the remaining fractures logged appear to be hairline fractures.
- **MW-49** – Three possible water bearing fractures were recorded at 52, 54, and 55 feet below top of casing. The caliper measured a maximum 14-inch diameter within the open fracture zones.
- **MW-50** – Numerous hairline fractures were identified with in MW-50, but no apparent open fractures were noted below the water table.

- **MW-51** – Geophysical logging could not be completed due to collapse of the well.
- **MW-52** – The most likely water-producing feature in MW-52 occurs at 110 feet below top of casing. A discontinuous open fracture was also identified closer to the bottom of the well at 152 feet.
- **MW-53** – Two possible water bearing fractures were recorded at 126 and 127 feet below top of casing.

3.4 LNAPL Fingerprints

As discussed in Section 2.3.2, one LNAPL sample was collected at MW-05 to determine the type of product present, product properties, and infer potential sources. Results from MW-05 indicate that the sample is mainly hydrocarbons in the C10 to C41 range suggesting a mixture of #2 diesel range product with a heavier product such as # 4 fuel oil or a light lubrication oil at a ratio of approximately 40% to 60%, respectively. Previous results from LNAPL samples from MW-28A and RW-17 also reported a mixture of # 2 diesel range and # 4 fuel oil in varying ratios.

3.5 Groundwater Elevation Gauging Results

As previously discussed, groundwater gauging measurements were collected in July 2002, October 2002, January 2003, April 2003, and July 2003.

Generally, groundwater potential in the main plant area decreases toward the southeast. However, an area of higher groundwater elevation is present in the vicinity of RW-9, at the center of the facility buildings. This may cause groundwater to flow south and southwest in the area just north of the New Landfill, west in the area near the Stormwater Retention Pond, and north and northeast in the northern portion of the facility. Additionally, groundwater in the southern portion of the site seems to follow a potentiometric gradient across the landfills from west to east or in an east-southeast direction. Actual groundwater flow in any portion of the site would be dependent on the presence of water bearing fractures and their orientation.

Based on a review of groundwater gauging data, presented in Tables 2A through 2E, it appears that groundwater elevation may be seasonally influenced. The data indicate that groundwater elevations increased from July 2002 to October 2002 and remained the relatively the same through January 2003. Groundwater elevations increased in April 2003 and dropped slightly in July 2003.

The results of each of the groundwater gauging events are briefly described below.

The July 2002 groundwater gauging results are summarized in Table 2A and a groundwater elevation contour map is provided as Figure 5. Groundwater elevations in July 2002 ranged from 227.02 feet

above mean sea level (AMSL) to 295.88 feet AMSL. Average hydraulic gradient across the site is approximately 0.17 feet/foot and appears to range from 0.37 feet/foot to 0.027 feet/foot. LNAPL was encountered in 19 of the 64 wells gauged ranging from 0.01 to 6.79 feet thick with an average of 1.19 feet thick and a median value of 0.4 feet thick.

The October 2002 groundwater gauging results are summarized in Table 2B and a groundwater elevation contour map is provided as Figure 6. Groundwater elevations in October 2002 ranged from 228.03 feet AMSL to 306.88 feet AMSL. Average hydraulic gradient across the site is approximately 0.18 feet/foot and appears to range from 0.42 feet/foot to 0.051 feet/foot. LNAPL was encountered in 18 of the 64 wells gauged ranging from a sheen to 1.64 feet thick and averaging 0.46 feet thick and a median of 0.38 feet thick.

The January 2003 groundwater gauging results are summarized in Table 2C and a groundwater elevation contour map is provided as Figure 7. Groundwater elevations in January 2003 ranged from 229.56 feet AMSL to 301.63 feet AMSL. Average hydraulic gradient across the site is approximately 0.14 feet/foot and appears to range from 0.21 feet/foot to 0.050 feet/foot. LNAPL was encountered in 18 of the 61 wells gauged ranging from a sheen to 7.31 feet thick with an average of 0.98 feet thick and a median of 0.40 feet thick.

The April 2003 groundwater gauging results are summarized in Table 2D and a groundwater elevation contour map is provided as Figure 8. Groundwater elevations in April 2003 ranged from 231.42 feet AMSL to 306.72 feet AMSL. Average hydraulic gradient across the site is approximately 0.15 feet/foot and appears to range from 0.37 feet/foot to 0.020 feet/foot. LNAPL was encountered in 17 of the 63 wells gauged ranging from 0.03 to 12.59 feet thick with an average of 4.68 feet thick and a median of 0.56 feet thick.

The July 2003 groundwater gauging results are summarized on Table 2E and a groundwater elevation contour map is provided as Figure 9. Groundwater elevations in July 2003 ranged from 226.47 feet AMSL to 305.06 feet AMSL. Average hydraulic gradient across the site is approximately 0.084 feet/foot and appears to range from 0.17 feet/foot to 0.031 feet/foot. LANPL was encountered in 14 of the 70 wells gauged ranging from 0.05 to 2.99 feet thick with an average of 0.63 feet thick and a median of 0.41 feet thick.

3.6 Groundwater Sample Analytical Results

As discussed in Section 2.1.3, semi-annual groundwater sampling was conducted in October of 2002 and April 2003 and included the collection of groundwater samples using passive diffusion bags, conventional, and low flow sampling methods. Supplemental groundwater sampling was conducted in July 2003 and included collection of groundwater samples using conventional sampling methods. Analytical results were received electronically from the laboratory and imported into the groundwater

database for analysis. The following subsections discuss the results of the PDB, conventional, and low flow groundwater sample analysis, respectively.

3.6.1 Passive Diffusion Bag Results

3.6.1.1 October 2002 Sampling Event

As shown on Table 3A, 41 PDB samples were collected with two duplicate samples. Analytical results, summarized in Table 4, indicate that three wells (MW02, RW13, and TH36) had trace amounts of VOCs reported; none of which were detected in excess of GWQS. The remaining wells (MW04, MW06, MW15, MW16, MW32, MW33A, MW34, MW35, MW37, RW09, RW11, RW14, RW15, and RW16) had reported concentrations of one or more of the following compounds in excess of the GWQS: 1,1,1-trichloroethane (0.4 ug/L - 400 ug/L), 1,1,2-trichloroethane (7.8 ug/L – 8.1 ug/L), 1,1-dichloroethane (1.7 ug/L - 620 ug/L), 1,1-dichloroethene (0.4 ug/L - 40 ug/L), 1,2-dichloroethane (25 ug/L - 25 ug/L), chloroethane (950 ug/L - 970 ug/L), cis-1,2-dichloroethene (1.1 ug/L - 420 ug/L), tetrachloroethylene (0.3 ug/L – 7.9 ug/L), trichloroethylene (0.4 ug/L - 64 ug/L), and vinyl chloride (2.8 ug/L - 350 ug/L). Figure 10 shows groundwater analytical results for compounds, which were reported at concentrations in excess of the GWQS at each well. Based on the laboratory analytical results, an analysis of concentration vs. depth was conducted at wells at which more than one PDB was deployed. Results of this analysis were inconsistent as some concentrations decreased with depth while others increased or stayed the same.

3.6.1.2 April 2003 Sampling Event

As shown on Table 3B, 39 PDB samples were collected with two duplicate samples. Analytical results, summarized in Table 4, indicate that three wells (RW13, RW14, and TH36) had trace amounts of VOCs reported; none of which were detected in excess of GWQS. The remaining wells (MW04, MW16, MW32, MW33A, MW34, MW35, MW37, RW09, RW11, RW15, RW16, and THWLS) had reported concentrations of one or more of the following compounds in excess of the GWQS: 1,1,1-trichloroethane (0.3 ug/L - 150 ug/L), 1,1-dichloroethane (0.9 ug/L - 310 ug/L), 1,1-dichloroethene (0.6 ug/L - 70 ug/L), 1,2-dichloroethane (1.4 ug/L - 48 ug/L), carbon tetrachloride (1.3 ug/L – 5.1 ug/L), chloroethane (81 ug/L – 2,600 ug/L), cis-1,2-dichloroethene (0.5 ug/L - 320 ug/L), tetrachloroethylene (0.3 ug/L – 7.9 ug/L), trichloroethylene (0.4 ug/L - 53 ug/L), and vinyl chloride (4.7 ug/L - 350 ug/L). Figure 10 shows groundwater analytical results for compounds, which were reported at concentrations in excess of the GWQS at each well. Based on the laboratory analytical results, an analysis of concentration vs. depth was conducted at wells at which more than one PDB was deployed. Results of this analysis were inconsistent as some concentrations decreased with depth while others increased or stayed the same.

3.6.1.3 Specific Comparison of the October 2002 and the April 2003 Sampling Event.

- **MW-04** – Concentrations of tetrachloroethylene in 2002 showed a decreasing trend with depth and was projected to be less than GWQS at 60 feet and 315 feet. Conversely in 2003 concentrations of tetrachloroethylene increased with depth and could not be projected over the depth of the aquifer. During the 2002 sampling event, concentrations of cis-1,2-dichloroethene, trichloroethylene, and vinyl chloride also exceeded GWQS but could not be projected over the depth of the aquifer. In 2003 concentrations trichloroethylene increased with depth and could not be projected over the depth of the aquifer.
- **MW-06** – In 2002 concentrations of 1,1,1-trichloroethane, and trichloroethylene all showed decreasing trends with depth. These compounds were projected to decrease to concentrations below GWQS to 286 feet and 548 feet, respectively. Concentrations of 1,1-dichloroethene did not change over depth and could not be projected over the depth of the aquifer. Due to vandalism MW-06 could not be sampled with PDBs in 2003; however the well will be repaired and sampled in the future.
- **MW-15** – Concentrations of trichloroethylene remained consistent with depth and were slightly in excess of the GWQS in 2002. This well was sampled via conventional methods in 2003.
- **MW-16** – In 2002 and 2003 concentrations of 1,1-dichloroethene and tetrachloroethylene showed decreasing trends with depth and were detected at concentrations below GWQS in the final PDB sample depth (190 feet).
- **MW-32** – Concentrations of trichloroethylene in 2002 showed a minimal decreasing trend with depth. This compound was projected to decrease to concentrations below GWQS to 239 feet, respectively. In 2003 concentrations of trichloroethylene slightly increased with depth and concentration gradients could not be projected. In 2002 concentrations of 1,1-dichloroethene showed an increasing trend between 118 and 129 feet, although in 2003 1,1-dichloroethene did not exceed GWQS.
- **MW-33A** – In 2002 and 2003 concentrations of 1,1-dichloroethene, tetrachloroethylene, and trichloroethylene at this well showed a decreasing trend with depth. These compounds were projected to decrease to concentrations below GWQS to 115 feet, 129 feet, and 130 feet, respectively.
- **MW-34** – Concentrations of tetrachloroethylene and trichloroethylene at this well showed an increasing trend with depth. The concentration gradient over the depth of the aquifer for these compounds could not be projected.

- **MW-35** – In 2002 and 2003 concentrations of 1,1,1-trichloroethane, 1,1-dichloroethene, tetrachloroethylene, trichloroethylene, and trichloroethylene at this well illustrated a decreasing trend with depth. These compounds were projected in 2002 to decrease to concentrations below GWQS to 145 feet, 157 feet, 148 feet, and 157 feet, and in 2003 to 134 feet, 141 feet, 140 feet, and 138 feet respectively.
- **MW-37** - Concentrations of trichloroethylene and carbon tetrachloride during both sampling events showed steady or increasing trends. The location at which concentrations would be expected to drop below GWQS could not be projected.
- **RW-09** – During the 2002 sampling event, concentrations of cis-1,2-dichloroethene showed an over all decreasing trend with depth and are projected to decrease to concentrations below GWQS at 217 feet, respectively. Concentrations of vinyl chloride showed an increasing trend at four of the PDB deployment depths (90 feet, 118 feet, 147 feet, 170 feet, and 193 feet) and decreased at the final deployment depth of 193 feet. It was not possible to project concentration gradients over the depth of the aquifer for vinyl chloride. Concentrations of tetrachloroethylene and trichloroethylene remained undetectable until reaching 193 feet; at which depth concentrations for both are just above GWQS. During the 2003 sampling event concentrations of cis-1,2-dichloroethene, tetrachloroethylene, trichloroethylene, and vinyl chloride showed a decreasing trend at various depths of the PDB deployment, but always increased by the final deployment depth of 188 feet. It was not possible to project concentration gradients over the depth of the aquifer for any of the compounds in 2003.
- **RW-11** – Concentrations of tetrachloroethylene in both sampling events showed decreasing trends, the PDBs were deployed at 115 feet and 170 feet decreasing below GWQS before reaching 170 feet.
- **RW-14** – During the sampling event in October 2002 concentrations of 1,1-dichloroethane and trichloroethylene showed slightly decreasing trends in RW14. Based on these trends, concentrations of these compounds are expected to reduce to below GWQS at 211 and 525 feet, respectively. In the April 2003 sampling event concentrations of 1,1-dichloroethane and trichloroethylene were no longer reported in excess of GWQS.
- **RW-15** – Concentrations of trichloroethylene and tetrachloroethylene from the 2002 sampling event did not demonstrate a steady increase or decrease and the location at which concentrations would be expected to be below GWQS could not be projected. In the 2003 sampling event concentrations of trichloroethylene and tetrachloroethylene showed a decreasing trend. Concentrations of these compounds are expected to reduce below GWQS at 308 and 227, respectively.

- **RW-16** – In 2002 concentrations of chloroethane and 1,1,2-trichloroethane showed slightly decreasing trends in RW16. Based on these trends, concentrations of these compounds are expected to reduce to below GWQS at 1055 and 486 feet, respectively. However, concentrations of 1,1-dichloroethane, 1,1-dichloroethene 1,2-dichloroethane 1,2-dichloropropane and 1,1,1-trichloroethane showed steady or increasing trends and the location at which concentrations would be expected to be below GWQS could not be projected. During the 2003 sampling event concentrations of 1,1,1-trichloroethane, 1,1-dichloroethane, 1,1-dichloroethene 1,2-dichloroethane showed slightly decreasing trends in RW16. Based on these trends, concentrations of these compounds are expected to reduce to below GWQS at 170, 152, 214, and 355 feet, respectively. However, concentrations of chloroethane and vinyl chloride showed steady or increasing trends and the location at which concentrations would be expected to be below GWQS could not be projected.
- **THWLS** - Concentrations of 1,1,1-trichloroethane and 1,1-dichloroethane in monitoring well THWLS showed a decreasing trend with depth and are projected to decrease to concentrations below GWQS at 136 and 383 feet, respectively. Concentrations 1,1-dichloroethene, chloroethane, and vinyl chloride demonstrated an increasing trend between 110 and 123 feet; therefore, it was impossible to project concentration gradients over the depth of the aquifer.

3.6.2 Conventional Sample Results

3.6.2.1 October 2002 Sampling Event

As shown in Table 3A, nine wells were sampled during the October sampling event using conventional methods. Field parameters collected from sampled wells indicate that pH around MW-20, MW-03, and RW-10 that exhibited a pH range of 6.0 – 7.0 while pH in the vicinity of MW-25, MW-27, RW-03, RW-15, and THWLS were below 5.0. Dissolved oxygen (DO) measurement at each of the wells indicated that groundwater across the site was oxygenated at concentrations above 2.0 mg/l. Oxidation-reduction potential (ORP) appears to be split; groundwater appears to be oxidative in wells outside the LNAPL plume and reductive within the plume area.

Groundwater analytical results, summarized in Tables 5 and 6, reported no exceedences of GWQS for organic compounds in all wells sampled.

As shown in Table 7, all wells sampled for selected metals had reported exceedances of arsenic, chromium, and/or lead. Four of these wells (TH-36, MW-30, MW-36, and MW-39) did not have any other exceedances (Figure 11), while one of the remaining one (RW-11) also had reported concentrations of tetrachloroethene exceeding the GWQS. MW-30 was only sampled for arsenic and lead.

3.6.2.2 April 2003 Sampling Event

As shown in Table 3B, 14 wells were sampled during the April 2003 sampling event using conventional methods. Field parameters indicate that pH around MW-20, MW-03, and RW-10 ranged from 6.0 – 7.0. while groundwater in the vicinity of MW-25, MW-27, RW-03, RW-15, and THWLS exhibited pH measurements below 5.0. Dissolved oxygen (DO) measurements at each of the wells indicated that groundwater across the site was oxygenated at concentrations above 2.0 mg/l. Oxidation-reduction potential (ORP) appears to be mainly oxidative across the site, except at RW09, where groundwater ORP appeared reductive.

Groundwater analytical results, summarized in Tables 5 and 6, indicate four of the 14 wells sampled for organic compounds reported an exceedence of the GWQS. Well MW02A had reported concentrations of 1,1-dichloroethane (2.1 ug/L) and tetrachloroethane (0.8ug/L); MW06 had reported concentrations of 1,1,1-trichloroethene (140 ug/L), 1,1-dichloroethane (7.4 ug/L), tetrachloroethane (3.0 ug/L), and trichloroethylene (12.0 ug/L); MW15 had reported concentrations of tetrachloroethane (0.6 ug/L).

As shown in Table 7, four of the five wells sampled arsenic, chromium and/or lead reported exceedences of GWQS from the total samples. Dissolved sample results from each of the five wells reported no exceedences of GWQS for the metals sampled (Figure 11). Two of the five wells (TH-36 and MW-30) did not have any other exceedences while the remaining three (MW-04, MW-36, and MW39) were only sampled for arsenic and/or lead.

3.6.2.3 July 2003 Sampling Event: New Wells

As shown in Table 3B, seven of the wells installed in June and July 2003 were sampled using conventional sampling methods. One well (MW-51) could not be sampled due to collapse to above the water-table. Field parameters collected from the new wells sampled indicated that pH ranged between 6.0 and 7.0 at six of the seven wells samples with groundwater at MW49 showing a pH measurement of 8.0. DO readings at each well confirmed that groundwater at the new wells were oxygenated at concentrations above 2.0 mg/l. Oxidation-reduction potential appears to be oxidative in the new wells.

Groundwater analytical results, summarized in Table 6, reported no exceedences of GWQS for organic compounds and TPHC in all seven wells sampled.

3.6.2.4 Specific Comparison of the October 2002 and the April 2003 Sampling Event Exceedences.

- **MW-2A** – In the 2002 sampling event, MW-2A was sampled with PDBs and reported no exceedences of GWQS. In the 2003 sampling event the well was sampled conventionally and reported 1,1-dichloroethane and tetrachloroethane in exceedence of GWQS.

- **MW-06** – Sampled by PDB in 2002 1,1,1-trichloroethane, 1,1-dichloroethene, and trichloroethylene, were all detected above GWQS in the well. In 2003 sampling was completed conventionally with in MW-06 and reported the same exceedences as in 2002 with the addition of tetrachloroethane.
- **MW-15** – MW-15 reported trichloroethylene in 2002 and tetrachloroethane in 2003 just above GWQS. The sample was collected with a PDB during the first sampling event, and conventionally during the second sampling event.
- **MW-30** – Concentrations of arsenic and lead exceeded GWQS in the 2002 sampling event, but were not detected during the 2003 sampling event.
- **MW-36** - In 2002, concentrations of arsenic and lead exceeded GWQS, but in 2003 only lead exceeded GWQS. Arsenic concentrations in 2003 were detected in the total sample, but were not detected in the filtered sample.
- **MW-39** – Total concentrations of arsenic and lead exceeded GWQS in both sampling events. In the 2003 sampling event a filtered results for arsenic and lead were not detected.
- **RW-11** – Chromium only exceeded GWQS during the 2002 sampling event.

3.6.3 Low Flow Sample Results

3.6.3.1 October 2002 Sampling Event

As shown in Table 6, three of the eight wells sampled for organic compounds reported exceedences of GWQS. Well RW-15 reported, tetrachloroethene (4.9 ug/L) and trichloroethylene (9 ug/L); THby4 reported vinyl chloride (20 ug/L); THWLS reported 1,1-dichloroethane (140 ug/L), 1,1-dichloroethene (4.4 ug/L), and vinyl chloride (20 ug/L).

3.6.3.2 April 2003 Sampling Event

As shown in Table 7, two of seven wells sampled for arsenic, chromium, and/or lead reported no exceedences of GWQS in neither the total or dissolved sample.

Different wells were sampled via low flow between the two events due to the presence of product during a previous conventional sampling.

4.0 CONCLUSIONS AND RECOMMENDATIONS

This section provides conclusions and recommendations based on the data for the July 2002 to July 2003 reporting period.

4.1 Well Search

4.1.1 Conclusions

Based on the original well search results, several domestic water supply wells were identified within ½-mile of the Site. However, as discussed in Section 3.2.1, the plotted locations of many wells on Figure 3 do not appear accurate and address matching and geo-referencing could correct only a small portion of all the wells identified in the well search.

4.1.2 Recommendations

ENSR recommends further inquiry and correction to the reported Bureau of Water Allocation (BWA) well locations. Further inquiry may include, an internet address search, public record review, and other methods as may be necessary to make the appropriate corrections to the BWA reported well locations.

4.2 Well Installation

4.2.1 Conclusions

A total of eight new monitoring wells were installed at the site in accordance with the variance request submitted to BWA. One of the wells (MW-51) collapsed immediately after installation. Analytical results from these wells indicated that dissolved-phase chlorinated VOC impacts are not delineated vertically or horizontally at the southwestern property boundary

4.2.2 Recommendations

As per the NJDEP Water Allocation Well Permit ENSR proposes to retrofit the new wells with appropriate screen and casing. In an effort to complete horizontal and vertical delineation ENSR recommends MW-51 be properly abandoned and re-drilled in the vicinity of MW-51 and that up to three deep wells at NJDEP recommended locations be installed. Further, ENSR recommends assessing the potential for modification of the on site potable and former potable wells into monitoring wells.

4.3 Geophysical Logging

4.3.1 Conclusions

A review of the 2003 geophysical data supports the previous findings that the subsurface aquifer is fractured karst-like dolomite. Groundwater does not appear in significant quantity in the overburden and appears to quickly infiltrate from the overburden into the bedrock aquifer. Geophysical logs were unable to illustrate the main water transport mechanism across the site.

Due to limitations in the present data, fracture connectivity was unable to be conclusively demonstrated. However, based on the extent of the LNAPL and dissolved-phase constituents at the site, it appears that many wells are hydraulically connected.

4.3.2 Recommendations

A fraction of the wells onsite have been logged and there are still gaps in the information. ENSR recommends continuing the geophysical investigations at up to 20 additional onsite wells in an effort to better characterize the locations and orientations of the fractures at well locations across the site.

4.4 LNAPL

4.4.1 Conclusions

Based on the analytical results of the LNAPL sample collected, the product present in this location is a mix of #2 fuel oil and a heavier product – possibly #4 fuel oil or a light lubricating oil. Both #2 and #4 fuel oil have historically been stored and used in appreciable quantities on-site as well as quench oil, which has previously been identified as the product likely present in RW-9.

4.4.2 Recommendations

As per NJDEP recommendation, ENSR will collect up to five additional LNAPL samples in an effort to better characterize the product plume and assess potential source areas.

4.5 Groundwater Investigation and Data Analysis

4.5.1 Conclusions

Historic groundwater analytical results at specific well locations do not appear to show consistent results or trends in concentrations over time. This may be related to inconsistencies in sampling and analysis methodology and procedures or maybe attributed to analytical variability. However, while

concentrations over time have not appeared consistent, specific chlorinated organic compounds have consistently been detected at specific wells. Other analytes previously detected in excess of GWQS do not have any consistent spatial or temporal patterns.

Because significant groundwater flow is not expected, it does not appear that the dissolved phase contaminants will migrate significantly from the wells at which they are identified. However, the analytical results of the groundwater samples collected in 2002 and 2003 suggest that chlorinated organic compounds may extend beyond the site boundaries as horizontal delineation is not completed at the southwestern site boundaries.

With respect to TPHC and LNAPL, product recovery operations will be continued at the site and groundwater samples using both PDB and conventional methods are proposed for each well that was not sampled during the October 2002 and April 2003 sampling rounds due to the presence of product. Sampling will be contingent upon the absence of product prior to sampling.

4.5.2 Recommendations

Analytical sample results of the groundwater sampled in 2002 and 2003 suggest that chlorinated organic compounds are not vertically delineated. Analytical samples at the southwestern site boundaries are not horizontally delineated for chlorinated organic compounds. ENSR recommends that the location of nearby wells identified in the well search be verified. Verification of the locations of these wells would help in the assessment of groundwater quality southwest of the site and in the determination of potential offsite impact. Additionally as previously indicated, ENSR recommends installation of deep wells to assist in determining vertical delineation as well as a re-installation of MW-51 to further assess impacts at the southwest property boundary.

With respect to arsenic, chromium, and lead concentrations, ENSR recommends that wells MW-4, MW-30, MW-36, MW-39, RW-09, and TH-36 be re-sampled during upcoming semiannual sampling (October 2003) to confirm concentrations of these compounds below GWQS. Each well sampled will continue to have a filtered and unfiltered samples collected to determine whether suspended solids are contributing to elevated metal concentrations.

5.0 REFERENCES

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TABLES

TABLE 1
SUMMARY OF WELL SEARCH RESULTS
Former Ingersoll Rand Facility
Phillipsburg, New Jersey

Permit #	Owner	Address	Well ID	Well Use (1)	NJSP X (NAD83)	NJSP Y	Revised NJSP X	Revised NJSP Y	Finish Depth (2)	Distance From Site (3)	Corrected Distance
SITE WELL RECORDS											
24-23044	Ingersoll-Rand Corp.	---	TH36	B	305350	675193	307151	678008	---	0.25	Site
24-22755	Ingersoll-Rand Corp.	---	---	B	304272	675201	---	---	---	0.5	Site
24-23045	Ingersoll-Rand Corp.	---	---	B	304272	675201	---	---	---	0.5	Site
24-23178	Ingersoll-Rand Corp.	---	THWLS (TH28)	B	304261	673886	306953	678038	---	0.5	Site
24-27071	Ingersoll-Rand Corp.	942 Memorial Parkway	---	B	303281	676625	---	---	150	0.5	Site
24-27073	Ingersoll-Rand Corp.	942 Memorial Parkway	---	B	303281	676625	---	---	100	0.5	Site
24-27074	Ingersoll-Rand Corp.	942 Memorial Parkway	RW16	B	303281	676625	307091	678221	155	0.5	Site
24-27075	Ingersoll-Rand Corp.	942 Memorial Parkway	RW15	B	303281	676625	307268	678344	170	0.5	Site
24-27076	Ingersoll-Rand Corp.	942 Memorial Parkway	---	B	303281	676625	---	---	120	0.5	Site
24-27126	Ingersoll-Rand Corp.	942 Memorial Parkway	RW14	B	303291	677941	306928	677543	170	0.5	Site
24-27105	Ingersoll-Rand Corp.	942 Memorial Parkway	RW12	B	302269	675217	306512	677620	170	0.75	Site
24-27106	Ingersoll-Rand Corp.	942 Memorial Parkway	RW13	B	302269	675217	306454	677124	170	0.75	Site
24-40102	Ingersoll Rand	942 Memorial Parkway	B 2-829	B	300925	680692	---	---	46	1	Site
24-23179	Ingersoll-Rand Corp.	OFF HWY 22	3	E	305350	675193	---	---	117	0.25	Site
24-24673	Ingersoll-Rand Corp.	942 Memorial Parkway	---	E	304293	677933	---	---	175	0.25	Site
24-22756	Ingersoll-Rand Corp.	942 Memorial Parkway	RW1	E	307384	679225	307767	678261	135	Site	Site
24-22756	Ingersoll-Rand Corp.	942 Memorial Parkway	RW1	E	307384	679225	307767	678261	135	Site	Site
24-23078	Ingersoll-Rand Corp.	S. OF RT. 22	RW2	E	307384	679225	307554	678261	150	Site	Site
24-23180	Ingersoll-Rand Corp.	S. OF RT. 22	RW4	E	306382	679233	307117	678025	150	Site	Site
24-23816	Ingersoll-Rand Corp.	---	RW3	E	307384	679225	307919	678430	---	Site	Site
24-24671	Ingersoll-Rand Corp.	942 Memorial Parkway	RW6	E	307384	679225	307617	678360	200	Site	Site
24-24672	Ingersoll-Rand Corp.	942 Memorial Parkway	RW7	E	307384	679225	307453	678260	175	Site	Site
24-24680	Ingersoll-Rand Corp.	942 Memorial Parkway	RW8	E	307384	679225	307414	678116	175	Site	Site
24-25010	Ingersoll-Rand Corp.	942 Memorial Parkway	RW5	E	307384	679225	307746	678459	175	Site	Site
24-34007	Ingersoll-Dresser PU	942 Memorial Parkway	---	E	305381	679240	---	---	150	Site	Site
24-10334	Ingersoll-Rand Corp.	---	---	I	307384	679225	---	---	---	Site	Site

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24-15860	Ingersoll-Rand Corp.	---	MW1	M	305350	675193	307302.728	678719.758	---	0.25	Site
24-15861	Ingersoll-Rand Corp.	---	---	M	305350	675193	---	---	---	0.25	Site
24-15862	Ingersoll-Rand Corp.	---	---	M	305350	675193	---	---	---	0.25	Site
24-15863	Ingersoll-Rand Corp.	---	MW3	M	305350	675193	307103	676140	---	0.25	Site
24-15864	Ingersoll-Rand Corp.	---	MW4	M	305350	675193	307594	676491	---	0.25	Site
24-15865	Ingersoll-Rand Corp.	---	MW5	M	305350	675193	307506	677351	---	0.25	Site
24-25893	Ingersoll-Rand Corp.	---	MW2A	M	304282	676618	306138	676387	125	0.25	Site
24-27000	Ingersoll-Rand Corp.	942 Memorial Parkway	RW9	M	304293	677933	306546	678133	200	0.25	Site
24-27061	Ingersoll-Rand Corp.	942 Memorial Parkway	RW10	M	304293	677933	306128	678173	175	0.25	Site
24-27086	Ingersoll-Rand Corp.	942 Memorial Parkway	RW11	M	304282	676618	306597	678540	175	0.25	Site
24-28442	Ingersoll-Rand Corp.	942 Memorial Parkway	MW8	M	304303	679249	307544	678552	200	0.25	Site
24-28443	Ingersoll-Rand Corp.	942 Memorial Parkway	MW9	M	304303	679249	307783	678103	190	0.25	Site
24-28444	Ingersoll-Rand Corp.	942 Memorial Parkway	MW11	M	304303	679249	306389	677545	200	0.25	Site
24-28445	Ingersoll-Rand Corp.	942 Memorial Parkway	MW6	M	304303	679249	306433	676085	195	0.25	Site
24-28446	Ingersoll-Rand Corp.	942 Memorial Parkway	---	M	304303	679249	---	---	150	0.25	Site
24-28574	Ingersoll-Rand Corp.	942 Memorial Parkway	MW12	M	304303	679249	307551	678712	175	0.25	Site
24-28713	Ingersoll-Rand Corp.	942 Memorial Parkway	MW13	M	304303	679249	307388	677624	200	0.25	Site
24-28744	Ingersoll-Rand Corp.	942 Memorial Parkway	MW16	M	304303	679249	306353	677316	200	0.25	Site
24-28745	Ingersoll-Rand Corp.	942 Memorial Parkway	MW15	M	304303	679249	306853	677319	150	0.25	Site
24-29052	Ingersoll-Rand Corp.	942 Memorial Parkway	MW19	M	304303	679249	308386	678342	150	0.25	Site
24-29053	Ingersoll-Rand Corp.	942 Memorial Parkway	MW17	M	304303	679249	308801	678905	157	0.25	Site
24-29054	Ingersoll-Rand Corp.	942 Memorial Parkway	MW18	M	304303	679249	308112	678875	150	0.25	Site
24-29144	Ingersoll-Rand Corp.	942 Memorial Parkway	MW21	M	304303	679249	307743	678658	200	0.25	Site
24-29145	Ingersoll-Rand Corp.	942 Memorial Parkway	---	M	304303	679249	---	---	175	0.25	Site
24-29146	Ingersoll-Rand Corp.	942 Memorial Parkway	MW20	M	304303	679249	308514	678750	160	0.25	Site
24-30001	Ingersoll-Rand Corp.	942 Memorial Parkway	MW24	M	304303	679249	306175	677719	147	0.25	Site
24-30002	Ingersoll-Rand Corp.	942 Memorial Parkway	MW26	M	304303	679249	307653	677415	160	0.25	Site
24-30003	Ingersoll-Rand Corp.	942 Memorial Parkway	MW25	M	304303	679249	307578	677210	160	0.25	Site

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24-36865	Ingersoll-Rand Corp.	Roseberry St.	MW27	M	304282	676618	307170	677443	---	0.25	Site
24-36866	Ingersoll-Rand Corp.	942 Memorial Parkway	---	M	304282	676618	---	---	---	0.25	Site
24-36868	Ingersoll-Rand Corp.	942 Memorial Parkway	MW29	M	304282	676618	307793	677639	---	0.25	Site
24-36869	Ingersoll-Rand Corp.	942 Memorial Parkway	MW30	M	304282	676618	307948	677069	---	0.25	Site
24-36870	Ingersoll-Rand Corp.	942 Memorial Parkway	MW31	M	304282	676618	306344	678111	---	0.25	Site
24-36871	Ingersoll-Rand Corp.	942 Memorial Parkway	MW32	M	304282	676618	306914	677513	---	0.25	Site
24-36984	Ingersoll-Rand Corp.	942 Memorial Parkway	MW34	M	304282	676618	305724	676154	---	0.25	Site
24-36985	Ingersoll-Rand Corp.	942 Memorial Parkway	---	M	304282	676618	---	---	---	0.25	Site
24-36986	Ingersoll-Rand Corp.	942 Memorial Parkway	MW36	M	304282	676618	307325	675547	---	0.25	Site
24-36987	Ingersoll-Rand Corp.	942 Memorial Parkway	MW37	M	304282	676618	307978	676246	---	0.25	Site
24-36988	Ingersoll-Rand Corp.	942 Memorial Parkway	MW38	M	304282	676618	307653	675709	---	0.25	Site
24-36989	Ingersoll-Rand Corp.	942 Memorial Parkway	MW39	M	304282	676618	306783	675364	---	0.25	Site
24-36990	Ingersoll-Rand Corp.	942 Memorial Parkway	MW35	M	304282	676618	306274	675714	---	0.25	Site
24-37362	Ingersoll-Rand Corp.	942 Memorial Parkway	MW33A	M	304282	676618	305686	676712	---	0.25	Site
24-37450	Ingersoll Rand	942 Memorial Parkway	MW28A	M	300925	680692	307575	677794	125	1	Site
24-38012	Ingersoll Rand	942 Memorial Parkway	MW44	M	300925	680692	305503	677772	---	1	Site
24-38015	Ingersoll Rand	942 Memorial Parkway	MW41	M	300925	680692	305832	678202	150	1	Site
24-38013	Ingersoll Rand	942 Memorial Parkway	---	M	300925	680692	---	---	---	1	Site
24-38016	Ingersoll Rand	942 Memorial Parkway	MW40	M	300925	680692	305905	678740	140	1	Site
24-38014	Ingersoll Rand	942 Memorial Parkway	MW42	M	300925	680692	305595	679535	---	1	Site
24-38751	Ingersoll Rand	942 Memorial Parkway	MW43A	M	300925	680692	305504	678609	105	1	Site
24-38011	Ingersoll Rand	942 Memorial Parkway	MW45	M	300925	680692	305118	678766	75	1	Site
24-27026	Ingersoll-Rand Corp.	942 Memorial Parkway	RW8A	M	307384	679225	307425	678112	197	Site	Site
24-28746	Ingersoll-Rand Corp.	942 Memorial Parkway	RW17	M	307384	679225	308249	678608	150	Site	Site
24-39626	Phillipsburg Townsh	942 Memorial Parkway	SVE-1	M	300925	680692	---	---	25.5	1	Site

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
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24-39627	Phillipsburg Townsh	942 Memorial Parkway	SVE-2	V	300925	680692	---	---	25	1	Site
24-39628	Phillipsburg Townsh	942 Memorial Parkway	SVE-3	V	300925	680692	---	---	---	1	Site
24-39629	Ingersoll Rand	942 Memorial Parkway	SVE-4	V	300925	680692	---	---	---	1	Site
24-39630	Ingersoll Rand	942 Memorial Parkway	SVE-5	V	300925	680692	---	---	---	1	Site
TOTAL ON SITE WELL RECORDS:											
				Soil Boring Permits ⁴ = 13							
				Recovery Wells = 12							
				Industrial Wells = 1							
				Monitoring Wells = 53							
				Gas Vents = 4							
OFF-SITE WELL RECORDS PLOTTED WITHIN SITE BOUNDARIES:											
24-36704	Larken Associates	RT 57 & Stryker Road	B-17	B	308452	677902	310532	680642	52	?	0.5
24-00201	Frey Raymond J	Philipsburg R.D.	---	D	309443	676579	---	---	---	?	---
24-22641	Merlo William	607 Haig Blvd.	---	D	307364	676594	311359	674174	---	?	0.75
TOTAL OFF-SITE WELL RECORDS PLOTTED WITHIN SITE BOUNDARIES:											
				Soil Boring Permits ⁴ = 1							
				Domestic Wells = 2							
WELL RECORDS IDENTIFIED WITHIN 0.25 MILES OF THE SITE											
24-16215	Daubert Richard	4th & Memorial Pkwy	---	1	306393	680650	306640	680174	---	0.25	0.25
24-30806	Dowel Assoc.	135 Bloomfield Avenue	B2	B	308473	680634	---	---	41	0.25	---
24-30807	Dowel Assoc.	135 Bloomfield Avenue	B5	B	308473	680634	---	---	35	0.25	---
24-30808	Dowel Assoc.	135 Bloomfield Avenue	B6	B	308473	680634	---	---	52	0.25	---
24-30813	Dowel Assoc.	135 Bloomfield Avenue	B4	B	308473	680634	---	---	42	0.25	---
24-30814	Dowel Assoc.	135 Bloomfield Avenue	B1	B	308473	680634	---	---	52	0.25	---
24-340 41	Bell Atlantic	641 Memorial Parkway	B9	B	306393	680650	---	---	42	0.25	---
24-37413	Kamach Stella & Wol	Strykers Road	---	B	309243	680628	---	---	---	0.25	---
24-40443	K&S Enterprises	Strykers Road	B-1A	B	309243	680628	---	---	---	0.25	---

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24-04077	Schmauser Frank J.	High Street	---	D	306393	680650	309508	666502	---	0.25	>1
24-04931	Masciotti Emilio	1126 Stanley St.	---	D	307343	673862	308188	673785	---	0.25	0.25
24-08001	Daniele Graciela	159 W.71st St.	---	D	310532	677886	---	---	---	0.25	---
24-10023	Greenwich Estates	Fox Run, Greenwich Twp	---	D	307394	680642	---	---	---	0.25	>0.5
24-15550	GEM Enterprises Inc.	Rt. 22 West	---	D	310532	677886	---	---	---	0.25	---
24-16181	Conti Albert	821 Columbus Ave.	---	D	304293	677933	305765	674830	---	0.25	0.25
24-25553	Sisco David	South Main Street	---	D	308421	673854	307672	672486	120	0.25	0.25
24-35317	Bundy Emily	230 Lock St	---	D	308421	673854	308515	673486	205	0.25	0.5
24-19998	Bell & Howell Co.	795 Roble Rd.	---	M	309997	678497	---	---	---	0.25	---
24-19999	Bell & Howell Co.	795 Roble Rd.	---	M	309997	678497	---	---	---	0.25	---
24-20000	Bell & Howell Co.	795 Roble Rd.	---	M	309997	678497	---	---	---	0.25	---
24-20001	Bell & Howell Co.	795 Roble Rd.	---	M	309997	678497	---	---	---	0.25	---
24-20002	Bell & Howell Co.	795 Roble Rd.	---	M	309997	678497	---	---	---	0.25	---
24-27739	Amerada Hess	410 Memorial Parkway	MW1	M	306393	680650	---	---	70	0.25	---
24-27740	Amerada Hess	410 Memorial Parkway	---	M	306393	680650	---	---	42	0.25	---
24-27741	Amerada Hess	410 Memorial Parkway	MW3	M	306393	680650	---	---	70	0.25	---
24-27952	New Jersey Bell Tele	641 Memorial Parkway	MW5	M	305392	680657	---	---	85	0.25	---
24-27953	New Jersey Bell Tele	641 Memorial Parkway	MW7	M	305392	680657	---	---	108	0.25	---
24-27954	New Jersey Bell Tele	641 Memorial Parkway	MW6	M	305392	680657	---	---	105	0.25	---
24-28285	Amerada Hess	410 Memorial Parkway	MW1	M	306393	680650	---	---	143	0.25	---
24-28286	Amerada Hess	410 Memorial Parkway	MW2	M	306393	680650	---	---	137	0.25	---
24-28287	Amerada Hess	410 Memorial Parkway	MW3	M	306393	680650	---	---	138	0.25	---
24-28978	Dota Bros. Service	791 Wilbur Avenue	---	M	305350	675193	304953	674861	35	0.25	0.25
24-29402	New Jersey Bell Tele	641 Memorial Parkway	MW8	M	306393	680650	---	---	83	0.25	---
24-32949	Amerada Hess	410 Memorial Parkway	MW4	M	306393	680650	---	---	148	0.25	---
24-32950	Amerada Hess	410 Memorial Parkway	MW5	M	306393	680650	---	---	134	0.25	---
24-33783	Amerada Hess	410 Memorial Parkway	MW6	M	306393	680650	---	---	150	0.25	---
TOTAL WELL RECORDS WITHIN 0.25 MILES OF SITE:											
				Soil Boring Permits ⁴ = 8							
				Domestic Wells = 9							
				Monitoring Wells = 19							

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WELL RECORDS IDENTIFIED BETWEEN 0.25 AND 0.5 MILES FROM THE SITE											
24-30797	Mobil Oil Co. Inc.	RT 22 & Roseberry	SB5	B	304314	680665	---	---	32	0.5	---
24-30798	Mobil Oil Co. Inc.	Route 22	SB6	B	304314	680665	---	---	32	0.5	---
24-30799	Mobil Oil Co. Inc.	RT 22 & Roseberry	SB7	B	304314	680665	---	---	32	0.5	---
24-30800	Mobil Oil Co. Inc.	RT 22 & Roseberry	SB8	B	304314	680665	---	---	32	0.5	---
24-32522	First Fidelity Bank	S. Main & Sawmill Road	B5	B	304261	673886	---	---	40	0.5	---
24-32523	First Fidelity Bank	S. Main & Sawmill Road	B10	B	304261	673886	---	---	45	0.5	---
24-33961	National Realty & De	RT 22 & St James	37281	B	311513	675146	---	---	48	0.5	---
24-00094	Sanco Piece Dye Work	---	---	D	303270	675209	---	---	---	0.5	---
24-00281	Sanco Piece Dye Work	---	---	D	303270	675209	---	---	---	0.5	---
24-00710	Sutton Russell	Pohatcong Twsp	---	D	309423	673846	---	---	---	0.5	---
24-00794	Miller William F.	Pohatcong Twsp	---	D	305402	681973	305359	681799	---	0.5	0.5
24-01158	Baker Harlew G.	128 Hudson St. Lopatcong	---	D	307404	681957	299328	677143	---	0.5	>1.0
24-01926	Miller William F.	202 Edwards St. Lopatcong	---	D	305402	681973	305359	681799	---	0.5	0.5
24-03104	Rickline Ronald	---	---	D	305402	681973	---	---	---	0.5	---
24-03836	Marinelli A(E)nzo D.	Phillipsburg R.D. #2	---	D	309484	681942	---	---	---	0.5	---
24-04230	Paolina Carl	3rd St. Mom Rd? Pburg	---	D	304324	681981	---	---	---	0.5	---
24-04336	Sabo Gabor	304 Dana St. Phillipsburg	---	D	303312	680673	305703	681674	---	0.5	0.5
24-04562	Nicmic Anthony	Greenwich	---	D	311523	676563	---	---	---	0.5	---
24-04691	Nesbitt Leroy	874 Bates St.	---	D	305402	681973	---	---	---	0.5	---
24-06014	Wickes Lumber Co.	P.O. Box 167	---	D	310552	680618	---	---	---	0.5	---
24-06534	Hann Chester R.	386 Bate St.	---	D	310511	675154	303109	678391	---	0.5	0.5
24-15131	Mt. Top Construction	Rt. 22 West	---	D	311523	676563	---	---	---	0.5	---
24-15452	Rush Semple Mr.	Rt. 22 West	---	D	310502	673838	---	---	---	0.5	---
24-20010	Piazza Frank & Sam	---	---	D	310017	681229	---	---	---	0.5	---
24-22228	Hartzog Kevin C.	25 Plumstead Way	---	D	309957	673134	---	---	---	0.5	---
24-22800	Snyder Annmarie & K	600 Haig Blvd.	---	D	310511	675154	310640	673580	---	0.5	0.5
24-29214	Piazza Frank & Sam	RT 57	---	D	309484	681942	301172	676736	155	0.5	1

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24-05029	Ready Company	354 Lancaster Ave.	---	I	304314	680665	---	---	---	0.5	---
24-05803	McGinley Mills Inc.	---	---	I	303301	679256	304359	679080	---	0.5	0.25
24-21221	Shell Oil Co.	Rt. 22 & Pickford Ave	---	M	303845	679859	---	---	---	0.5	---
24-21222	Shell Oil Co.	Rt. 22 & Pickford Ave	---	M	303845	679859	---	---	---	0.5	---
24-21223	Shell Oil Co.	Rt. 22 & Pickford Ave	---	M	303845	679859	---	---	---	0.5	---
24-21767	Bell & Howell Co.	Rt 22	---	M	311075	678489	---	---	---	0.5	---
24-25202	New Jersey Bell Tele	660 Park Avenue	MW1A	M	303291	677941	---	---	102	0.5	---
24-25203	New Jersey Bell Tele	660 Park Avenue	MW4	M	303291	677941	---	---	116	0.5	---
24-25204	New Jersey Bell Tele	660 Park Avenue	MW3	M	303291	677941	---	---	116	0.5	---
24-25963	J.T. Baker Inc.	---	GSW2D	M	304272	675201	---	---	210	0.5	---
24-26657	Journal of Commerce	445 Marshall Street	MW1	M	303291	677941	303203	679174	127	0.5	0.5
24-26658	Journal of Commerce	445 Marshall Street	MW2	M	303291	677941	303203	679174	127	0.5	0.5
24-26659	Journal of Commerce	445 Marshall Street	MW3	M	303291	677941	303203	679174	127	0.5	0.5
24-27093	Amerada Hess	743 S. Main Street	MW1	M	304272	675201	303578	674049	15	0.5	0.75
24-27657	Amerada Hess	743 S. Main Street	MW1	M	304272	675201	303578	674049	49	0.5	0.75
24-27658	Amerada Hess	743 S. Main Street	MW2	M	304272	675201	303578	674049	63	0.5	0.75
24-27659	Amerada Hess	743 S. Main Street	MW3	M	304272	675201	303578	674049	51	0.5	0.75
24-27660	Amerada Hess	743 S. Main Street	MW4	M	304272	675201	303578	674049	60	0.5	0.75
24-28903	Exxon Company USA	RT 22 E. & Lincoln Street	---	M	303301	679256	---	---	135	0.5	---
24-29118	Tersigni Oldsmobile	333 Morris Street	---	M	303312	680673	---	---	30	0.5	---
24-29350	NJ Dept. of Military	15 Heckman & Bates Street	MW2	M	303301	679256	303172	678236	20	0.5	0.5
24-29351	NJ Dept. of Military	15 Heckman & Bates Street	MW1	M	303301	679256	303172	678236	20	0.5	0.5
24-29352	NJ Dept. of Military	15 Heckman & Bates Street	MW3	M	303301	679256	303172	678236	20	0.5	0.5
24-29359	Flock Industries	259 Center Street	MW1	M	303281	676625	---	---	100	0.5	---
24-29476	NJ Dept. of Military	Heckman & Bates Street	MW1	M	303301	679256	303172	678236	98	0.5	0.5
24-29478	NJ Dept. of Military	Heckman & Bates Street	MW3	M	303301	679256	303172	678236	147	0.5	0.5
24-29493	Amerada Hess	743 S. Main Street	MW4	M	304272	675201	303578	674049	60	0.5	0.75
24-29494	Amerada Hess	743 S. Main Street	MW6	M	304272	675201	303578	674049	51	0.5	0.75

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TABLE 1
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Former Ingersoll Rand Facility
Phillipsburg, New Jersey

Permit #	Owner	Address	Well ID	Well Use (1)	NJSP X (NAD83)	NJSP Y	Revised NJSP X	Revised NJSP Y	Finish Depth (2)	Distance From Site (3)	Corrected Distance
24-35816	Stowaway Self Storag	1 RT 22 W	---	U	311533	677879	---	---	125	0.5	---
24-35262	N.J.D.O.T.	RT 22 TWSP. OF POHATCONG	RB-4-5	Z	311513	675146	---	---	15	0.5	---
TOTAL WELL RECORDS IDENTIFIED BETWEEN 0.25 AND 0.5 MILES FROM THE SITE:											
				Soil Boring Permits ⁴ = 7							
				Domestic Wells = 20							
				Industrial Wells = 2							
				Monitoring Wells = 26							
				Non-Public Wells = 1							
				Piezometers = 1							
WELL RECORDS IDENTIFIED BETWEEN 0.5 AND 0.75 MILES FROM THE SITE											
24-25686	Irco Comm. Fed. Cred	Hillcrest Blvd & Warren	VARIOUS	B	301299	679272	---	---	24	0.75	---
24-34692	Phillipsburg Townsh	324 Firth Street	---	B	301299	679272	---	---	---	0.75	---
24-35423	Tamburro Realty Co.	1315 RT 22 W	B-1	B	308411	672437	---	---	48	0.75	---
24-35566	F.G. Weisbrod c/o FO	500 Marshall St	B-1	B	301278	676641	---	---	80	0.75	---
24-37617	Sandhu Paul	Route 22	B-1-B	B	311962	673322	---	---	---	0.75	---
24-39172	Stowaway Self Storag	---	B-1	B	311962	673322	---	---	---	0.75	---
24-00230	Insertng Mailing Mach	---	---	D	312514	675139	---	---	---	0.75	---
24-00357	Geist Alvin R.	Rt. 22	---	D	312525	676556	301765	679861	---	0.75	0.75
24-00556	Marshall Kenneth L.	---	---	D	312544	679187	---	---	---	0.75	---
24-02079	Williams O Mr.	---	---	D	304250	672469	---	---	---	0.75	---
24-03871	MacChib Agostins	---	---	D	310562	681934	---	---	---	0.75	---
24-03884	Vasquez Frank	4th & Baltimore St.	---	D	307414	683273	306328	680893	---	0.75	0.25
24-03991	Av Frank	152 Chamber St.	---	D	305412	683288	298859	677393	---	0.75	>1.0
24-07893	Hennes Gerhard G. M	475 Riverside Dr.	---	D	301278	676641	---	---	---	0.75	---
24-08279	Hilltop Homes Inc.	Stewartsville Road	---	D	312514	675139	---	---	---	0.75	---
24-08280	Hilltop Homes Inc.	Stewartsville Road	---	D	312514	675139	---	---	---	0.75	---
24-08281	Hilltop Homes Inc.	Stewartsville Road	---	D	312514	675139	---	---	---	0.75	---
24-08282	Hilltop Homes Inc.	Stewartsville Road	---	D	312514	675139	---	---	---	0.75	---

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24-08283	Hilltop Homes Inc.	Stewartsville Road	---	D	312514	675139	---	---	---	0.75	---
24-08284	Hilltop Homes Inc.	Stewartsville Road	---	D	312514	675139	---	---	---	0.75	---
24-08285	Hilltop Homes Inc.	Stewartsville Road	---	D	312514	675139	---	---	---	0.75	---
24-08768	JM Nicholas Corp.	123 N. 3rd St.	---	D	309493	683257	---	---	---	0.75	---
24-11509	Goldstein William	---	---	D	301278	676641	---	---	---	0.75	---
24-11510	Thrun Arthur	Rd. # 1 Box 233	---	D	301278	676641	---	---	---	0.75	---
24-11881	Preston Trucking Co.	151 Easton Rd.	---	D	312514	675139	---	---	---	0.75	---
24-12119	Wason Paul	21 Gloucester Rd.	---	D	302290	677949	---	---	---	0.75	---
24-15616	Superior Quartz Prod	Rt. 519 & 22	---	D	312525	676556	---	---	---	0.75	---
24-17854	Stryker Charles M.	Stryker Rd.	---	D	310027	682545	---	---	---	0.75	---
24-25137	Housel James	Spring Street	---	D	308411	672437	308672	671424	200	0.75	0.75
24-29202	Rosado Leo	Stewartsville Road	---	D	312534	677871	---	---	115	0.75	---
24-31786	Unique Polysteel	Firth St	---	D	302280	676633	---	---	200	0.75	---
24-19839	Carpenter Technology	---	---	E	311036	673126	---	---	---	0.75	---
24-25063	New Jersey Bell Tele	660 Park Avenue	MW1	M	302290	677949	---	---	46	0.75	---
24-25064	New Jersey Bell Tele	660 Park Avenue	MW2	M	302290	677949	---	---	82	0.75	---
24-25729	Mobil Oil Corp.	RT 22 & James Road	MW3	M	309412	672430	---	---	20	0.75	---
24-25730	Mobil Oil Corp.	RT 22 & James Road	MW9	M	309412	672430	---	---	20	0.75	---
24-25964	J.T. Baker Inc.	---	MW1	M	301278	676641	---	---	180	0.75	---
24-26411	Mobil Oil Corp.	South Wood Avenue	MW1	M	309412	672430	---	---	25	0.75	---
24-26412	Mobil Oil Corp.	South Wood Avenue	MW2	M	309412	672430	---	---	25	0.75	---
24-26413	Mobil Oil Corp.	South Wood Avenue	MW3	M	309412	672430	---	---	25	0.75	---
24-26446	Mobil Oil Corp.	South Wood Avenue	MW4	M	309412	672430	---	---	25	0.75	---
24-27976	Michael's Carpets	RT 22 Memorial Parkway	MW1	M	301289	677957	---	---	75	0.75	---
24-28331	Letzler Esther & Al	Stockton Street	MRW1	M	305329	672461	300109	674580	40	0.75	>1.0
24-30140	Lopatcong Care Cente	Red School Lane	MW15	M	305412	683288	---	---	25	0.75	---

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24-30141	Lopatcong Care Cente	Red School Lane	MW16	M	305412	683288	---	---	25.6	0.75	---
24-30142	Lopatcong Care Cente	Red School Lane	MW17	M	305412	683288	---	---	25.6	0.75	---
24-33103	Exxon Company USA	500 RT 22 E	BW2	M	302300	679264	---	---	38	0.75	---
24-33104	Exxon Company USA	500 RT 22 E	BW3	M	302300	679264	---	---	41	0.75	---
24-33167	Exxon Company USA	500 RT 22 E	BW4	M	301299	679272	---	---	43	0.75	---
24-34030	Phillipsburg Townsh	324 Firth Street	MW1	M	301299	679272	301672	678049	---	0.75	0.75
24-34542	Exxon Company USA	500 RT 22 & Lincoln St	BW7	M	302300	679264	---	---	120	0.75	---
24-34543	Exxon Company USA	500 RT 22 & Lincoln St	BW8	M	302300	679264	---	---	45	0.75	---
24-34544	Exxon Company USA	500 RT 22 & Lincoln St	BW6	M	302300	679264	---	---	134	0.75	---
24-36754	Sandhu Paul Valley	400 Memorial Parkway	B-17	M	301289	677957	300859	679174	78	0.75	1
24-36746	Sandhu Paul Valley	400 Memorial Parkway	MW-1	M	301289	677957	300859	679174	77	0.75	1
24-31026	Automotive Financial	Route 519	---	N	313526	676548	---	---	185	0.75	---
24-38786	N&P Business Inc.	1185 Route 22 West	none	U	311962	673322	---	---	175	0.75	---
24-06136	Vanderbilt Bros.	RD Milford NJ	---	X	309412	672430	---	---	---	0.75	---
TOTAL WELL RECORDS IDENTIFIED BETWEEN 0.5 AND 0.75 MILES FROM THE SITE:											
				Soil Boring Permits ⁴ = 6							
				Domestic Wells = 25							
				Recovery Wells = 1							
				Monitoring Wells = 23							
				Public Wells = 1							
				Non-Public Wells = 1							
				Agricultural Wells = 1							

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Permit #	Owner	Address	Well ID	Well Use (1)	NJSP X (NAD83)	NJSP Y	Revised NJSP X	Revised NJSP Y	Finish Depth (2)	Distance From Site (3)	Corrected Distance
WELL RECORDS IDENTIFIED BETWEEN 0.75 AND 1.0 MILE FROM THE SITE:											
24-26588	J.T. Baker Inc.	600 N. Broad Street	SVSS1	B	302332	683312	---	---	---	1	---
24-26589	J.T. Baker Inc.	600 N. Broad Street	SVSS2	B	302332	683312	---	---	---	1	---
24-33052	Solco N.V.	RT 22 & RT 63	B-1	B	313506	673816	---	---	30	1	---
24-34306	Toll Brothers	RT 638	SB4	B	313506	673816	---	---	34	1	---
24-37247	Stryker Golf	Strykers Road	---	B	310572	683249	---	---	---	1	---
24-40047	Warren Lumber and Mi	15 Sawmill Street	B-1	B	309270	684271	---	---	---	1	---
24-03838	Mayuoli Francis	Strykers Road Pburg	1	D	310572	683249	---	---	---	1	---
24-04962	Piazza Fred J.	Rt. 24 Phillipsburg	---	D	312564	681919	301172	676736	---	1	1
24-06456	Stanganelli Aldo	703 Northhampton St, Easton PA	---	D	310572	683249	---	---	---	1	---
24-07481	Jessamine Stanley	Belvidere Rd. Phillipsburg NJ	---	D	304344	684612	302359	682674	---	1	>1.0
24-07620	Amore Kenneth C.	1223 S Main St Pburg	---	D	305319	671145	307828	672111	---	1	0.75
24-09471	Hames Easton Palmer	962 High St. Alpha NJ	---	D	304344	684612	---	---	---	1	---
24-11892	Tettamanti Charles	R.D.3 Stryker Rd., Pburg	---	D	310572	683249	---	---	---	1	---
24-15149	Miles Luther L.	870 Red School Lane, Pburg	---	D	306423	684596	---	---	---	1	---
24-16661	Stanganelli Armond	Strykers Rd Pburg	---	D	312107	682529	---	---	---	1	---
24-20053	Sun Quest Builders	Middle St Pohetcong Twp.	---	D	300776	681300	---	---	---	1	---
24-20054	Sun Quest Builders	Middle St Pohetcong Twp.	---	D	300776	681300	---	---	---	1	---
24-20393	Traina Gerard	RT 519 Greenwich Twp.	---	D	314147	677151	---	---	---	1	---
24-20840	Brown Fred A. Jr.	201 Beers St	---	D	299753	678576	299922	682268	---	1	>1.0
24-21038	Cara More Constructi	Greenwich Twp.	---	D	314156	678466	---	---	---	1	---
24-29306	Wright William	PO BOX 133, Lopatcong	---	D	302332	683312	---	---	225	1	---
24-37232	Burt Michael H.	2 Vista Court, Lopatcong, NJ	---	D	310572	683249	---	---	---	1	---
24-15159	St. Philip & St. Jam	Rt 519 & RT 22	---	G	313516	675132	---	---	---	1	---
24-06206	Pohatcong Associates	Pohatcong, NJ	---	I	312494	672407	---	---	---	1	---

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				(1)	(NAD83)	NJSP X	NJSP Y	Depth ⁽²⁾	From Site ⁽³⁾	Distance	
24-20551	Baker J.T. Chemical	22 Red School Lane	---	M	301864	682607	---	---	---	1	---
24-20847	Baker J.T. Chemical	22 Red School Lane	---	M	300776	681300	---	---	---	1	---
24-24619	Mobil Oil Corp.	Rt 22 & St. James Rd Pburg	---	M	312505	673824	---	---	---	1	---
24-24620	Mobil Oil Corp.	Rt 22 & St. James Rd Pburg	---	M	312505	673824	---	---	---	1	---
24-24621	Mobil Oil Corp.	Rt 22 & St. James Rd Pburg	---	M	312505	673824	---	---	---	1	---
24-25924	Garden State Water		GSW25	M	300200	676650	---	---	55	1	---
24-33183	Exxon Company USA	500 RT 22 E	BW5	M	301310	680689	---	---	44	1	---
24-34497	Shotmeyer Brothers P	1110 Belvidere Rd.	MW-1	M	302332	683312	---	---	14	1	---
24-29981	T&P Associates	Strykers Road	---	N	301310	680689	---	---	145	1	---
24-39226	Stryker Golf	942 Memorial Parkway	---	U	300925	680692	---	---	---	1	---
24-20250	Phillipsburg Town o	Hackensbury Rd. Neshanic NJ	---	Z	300754	678568	---	---	---	1	---
TOTAL WELL RECORDS IDENTIFIED BETWEEN 0.75 AND 1.0 MILE FROM THE SITE:											
				Soil Boring Permits ⁴ = 6							
				Domestic Wells = 16							
				Irrigation Wells = 1							
				Industrial Wells = 1							
				Monitoring Wells = 8							
				Public Wells = 1							
				Non-Public Wells = 1							
				Piezometers = 1							
WELL RECORDS IDENTIFIED FURTHER THAN 1.0 MILE FROM THE SITE:											
24-39526	Robertson Dowilas Gr	High Street and Carpenter	B-9	B	306387	669720	---	---	---	>1.0	---
24-40344	Atlantic States Cast	183 Sitgreaves St.	---	B	300868	673406	---	---	---	>1.0	---
24-39564	Lopatcong Board of E	Buckley Hill Drive and St	B-1	B	306526	687935	---	---	50	>1.0	---

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24-04490	Bickell Joseph	146-8th St, Morris Park Pburg	---	D	305309	669830	307640	680893	---	>1.0	---
24-10758	Merlo George	---	---	D	309393	669799	---	---	---	>1.0	---
24-16429	Lee James S. Jr.	---	---	D	300712	673205	---	---	---	>1.0	---
24-18458	Campbell Bruce	---	---	D	301780	671780	---	---	---	>1.0	---
24-23507	Veliz Pedro	1991 Main St. 00865	---	D	300178	673917	---	---	---	>1.0	---
24-36170	McVey James & Lauri	530 Carpentersville Road	---	D	304230	669838	---	---	205	>1.0	---
24-40999	Buss John	462 Route 519	---	D	356845	764109	---	---	137	>1.0	---
24-24116	McGinley Mills Inc.	Heckman & Bates Street	---	I	299219	679288	304359	679080	250	>1.0	---
44-38391	Atlantic States Cast	183 Sitgreaves St.	1	I	300868	673406	---	---	---	>1.0	---
24-17675	Exxon Company USA	Rt 22 East & Lincoln St. Pburg	MW1	M	299711	673213	---	---	---	>1.0	---
24-29403	New Jersey Bell Tele	641 Memorial Parkway	MW9	M	351602	680347	---	---	125	>1.0	---
24-30256	General Supply Compa	73 Mercer Street	MW1	M	300189	675233	299422	675674	47	>1.0	---
24-33667	Fasco Finishing Co.	191 Howard Street	MW1	M	300189	675233	---	---	71	>1.0	---
24-33668	Fasco Finishing Co.	191 Howard Street	MW2	M	300189	675233	---	---	70	>1.0	---
24-33669	Fasco Finishing Co.	191 Howard Street	MW3	M	300189	675233	---	---	77	>1.0	---
24-33670	Fasco Finishing Co.	191 Howard Street	MW4	M	300189	675233	---	---	75	>1.0	---
24-33671	Fasco Finishing Co.	191 Howard Street	MW5	M	300189	675233	---	---	70	>1.0	---
24-39610	SMP Trucking	200 Fayette Street	MW-1	M	298123	677071	---	---	30	>1.0	---
24-39611	SMP Trucking	200 Fayette Street	MW-2	M	298123	677071	---	---	51	>1.0	---
24-39612	SMP Trucking	200 Fayette Street	MW-3	M	298123	677071	---	---	41	>1.0	---

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Permit #	Owner	Address	Well ID	Well Use (1)	NJSP X (NAD83)	NJSP Y	Revised NJSP X	Revised NJSP Y	Finish Depth (2)	Distance From Site (3)	Corrected Distance
24-38059	Phillipsburg Townsh	191 Howard Street	MW-6	M	300868	673406	---	---	78	>1.0	---
24-308060	Phillipsburg Townsh	191 Howard Street	MW-7	M	300868	673406	---	---	77	>1.0	---
24-38061	Phillipsburg Townsh	191 Howard Street	MW-8	M	300868	673406	---	---	77	>1.0	---
24-38062	Phillipsburg Townsh	191 Howard Street	MW-10	M	300868	673406	---	---	110	>1.0	---
24-38063	Phillipsburg Townsh	191 Howard Street	MW-6D	M	300868	673406	---	---	110	>1.0	---
24-38064	Phillipsburg Townsh	191 Howard Street	MW-7D	M	300868	673406	---	---	110	>1.0	---
24-38065	Phillipsburg Townsh	191 Howard Street	MW-8D	M	300868	673406	---	---	110	>1.0	---
24-39176	Belvidere Road Lopat	1110 Belvidere Rd.	MW4	M	314921	698802	---	---	45	>1.0	---
24-39177	Belvidere Road Lopat	1110 Belvidere Rd.	MW5	M	314921	698802	---	---	30	>1.0	---
24-39178	Belvidere Road Lopat	1110 Belvidere Rd.	MW6	M	314921	698802	---	---	25	>1.0	---
24-39179	Belvidere Road Lopat	1110 Belvidere Rd.	MW7	M	314921	698802	---	---	45	>1.0	---
TOTAL WELL RECORDS IDENTIFIED FURTHER THAN 1.0 MILE FROM THE SITE:											
				Soil Boring Permits ⁴ = 4							
				Domestic = 9							
				Industrial Wells = 2							
				Monitoring Wells = 22							

Notes:

(1) Well use codes:

B = Deep Soil Boring	I = Industrial Well	V = Gas Vent
D = Domestic Well	M = Monitoring Well	X = Agricultural Well
E = Recovery Well	N = Public Supply Well	Z = Piezometer
G = Irrigation Well	U = Non Public Well	1 = Domestic Well

 Data that has been updated from Bureau of Water Allocation Summary Report

(2) Depths are reported in feet below ground surface.

(3) Distance from site (in miles) based on plotted location as provided by NJDEP Bureau of Water Allocation records.

(4) Soil Boring Permits may be blanket permits for conducting multiple deep soil borings.

Table 2A
SUMMARY OF GROUNDWATER GAUGING MEASUREMENTS: JULY 2002
Former Ingersoll Rand Facility
Phillipsburg, New Jersey

WELL ID	DATE	CASING ELEVATION (ft-AMSL)	DEPTH TO WATER (ft)	GW ELEVATION (ft-AMSL)	PRODUCT THICKNESS (ft)
MW-01	7/29/2002	363.72	112.21	251.51	none
MW-02A	7/29/2002	354.33	106.11	248.22	none
MW-03	7/29/2002	339.68	90.65	249.03	none
MW-04	7/29/2002	317.2	90.18	227.02	none
MW-05	7/29/2002	326.36	86.50	239.86	5.1
MW-06	7/29/2002	350.39	105.86	244.53	none
MW-08	7/29/2002	363.63	93.78	269.85	none
MW-09	7/29/2002	347.12	92.14	254.98	none
MW-10	7/29/2002	356.22	89.04	267.18	none
MW-11	7/29/2002	364.25	96.98	267.27	none
MW-12	7/29/2002	364.15	112.59	251.56	0.03
MW-13	7/29/2002	359.58	108.65	250.93	none
MW-15	7/29/2002	362.72	112.63	250.09	none
MW-16	7/29/2002	363.66	101.38	262.28	none
MW-17	7/29/2002	324.39	72.86	251.53	none
MW-18	7/29/2002	347.63	95.84	251.79	none
MW-19	7/29/2002	340.66	105.13	235.53	none
MW-20	7/29/2002	333.58	82.18	251.40	none
MW-21	7/29/2002	355.85	102.11	253.74	none
MW-24	7/29/2002	362.77	113.15	249.62	none
MW-25	7/29/2002	319.66	82.21	237.45	0.22
MW-26	7/29/2002	318.76	79.51	239.25	none
MW-27	7/29/2002	352.54	98.97	252.84	none
MW-28A	7/29/2002	344.27	67.00	276.53	0.24
MW-29	7/29/2002	327.58	86.94	239.90	none
MW-30	7/29/2002	290.67	58.15	231.78	none
MW-31	7/29/2002	368.09	110.05	257.30	none
MW-32	7/29/2002	367.37	113.11	253.52	none
MW-33A	7/29/2002	352.06	101.79	249.57	none
MW-34	7/29/2002	351.81	103.20	247.87	none
MW-35	7/29/2002	351.06	103.73	246.59	none
MW-36	7/29/2002	333.26	104.47	228.05	none
MW-37	7/29/2002	285.33	57.15	227.44	none
MW-38	7/29/2002	310.83	82.25	227.84	none
MW-39	7/29/2002	341.81	92.80	248.27	none
MW-40	7/29/2002	347.85	95.91	251.94	none
MW-41	7/29/2002	347.91	92.58	255.33	none
MW-42	7/29/2002	345.57	93.07	252.50	none
MW-43A	7/29/2002	341.15	88.32	252.83	none
MW-44	7/29/2002	340.59	89.55	251.04	none
MW-45	7/29/2002	308.05	54.76	253.29	none

Table 2A
SUMMARY OF GROUNDWATER GAUGING MEASUREMENTS: JULY 2002
Former Ingersoll Rand Facility
Phillipsburg, New Jersey

WELL ID	DATE	CASING ELEVATION (ft-AMSL)	DEPTH TO WATER (ft)	GW ELEVATION (ft-AMSL)	PRODUCT THICKNESS (ft)
Old- WW	7/29/2002	350	102.16	251.85	none
RW-01	7/29/2002	351.54	92.73	258.81	0.21
RW-02	7/29/2002	360.46	96.06	264.40	0.28
RW-03	7/29/2002	350.2	93.45	256.75	none
RW-04	7/29/2002	362.96	111.51	251.45	0.05
RW-05	7/29/2002	359.66	100.07	259.59	0.28
RW-06	7/29/2002	358.63	99.39	259.24	1.05
RW-07	7/29/2002	360.11	89.15	270.96	0.01
RW-08	7/29/2002	361.01	89.17	271.84	0.06
RW-08A	7/29/2002	360.3	89.42	270.88	6.79
RW-09	7/29/2002	363.67	67.79	295.88	0.06
RW-10	7/29/2002	363.14	106.11	257.03	none
RW-11	7/29/2002	362.42	83.57	278.85	none
RW-12	7/29/2002	363.16	108.98	254.18	0.2
RW-13	7/29/2002	360.21	107.60	252.61	none
RW-14	7/29/2002	362.07	110.92	251.15	none
RW-15	7/29/2002	362.07	104.43	257.64	0.08
RW-16	7/29/2002	363.35	111.34	252.01	3.59
RW-17	7/29/2002	341.8	95.07	246.73	0.04
TH-36	7/29/2002	361.15	90.10	271.05	none
TH-BF	7/29/2002	351.16	87.97	263.19	0.36
TH-by4	7/29/2002	373.37	110.53	262.84	0.05
THWLS	7/29/2002	373.47	110.87	262.60	none

TABLE 2B
SUMMARY OF GROUNDWATER GAUGING MEASUREMENTS: OCTOBER 2002
Former Ingersoll Rand Facility
Phillipsburg, New Jersey

WELL ID	DATE	CASING ELEVATION (ft-AMSL)	DEPTH TO WATER (ft)	GW ELEVATION (ft- AMSL)	PRODUCT THICKNESS (ft)
MW-01	10/17/2002	363.72	111.77	251.95	none
MW-02A	10/17/2002	354.33	104.75	249.58	none
MW-03	10/17/2002	339.68	90.13	249.55	none
MW-04	10/17/2002	317.2	89.17	228.03	none
MW-05	10/18/2002	326.36	77.31	249.05	none
MW-06	10/17/2002	350.39	104.65	245.74	none
MW-08	10/17/2002	363.63	92.68	270.95	none
MW-09	10/17/2002	347.12	88.71	258.41	none
MW-10	10/17/2002	356.22	90.31	265.91	none
MW-11	10/17/2002	364.25	90.22	274.03	none
MW-12	10/17/2002	364.15	111.82	252.33	0.04
MW-13	10/17/2002	359.58	107.22	252.36	none
MW-15	10/17/2002	362.72	114.20	248.52	none
MW-16	10/17/2002	363.66	94.12	269.54	none
MW-17	10/17/2002	324.39	71.91	252.48	none
MW-18	10/17/2002	347.63	95.17	252.46	none
MW-19	10/17/2002	340.66	103.21	237.45	none
MW-20	10/17/2002	333.58	80.71	252.87	none
MW-21	10/17/2002	355.85	97.60	258.25	none
MW-24	10/17/2002	362.77	112.65	250.12	Sheen
MW-25	10/17/2002	319.66	53.79	265.87	none
MW-26	10/17/2002	318.76	72.91	245.85	0.17
MW-27	10/17/2002	352.54	97.96	253.85	Sheen
MW-28A	10/17/2002	344.27	52.88	290.65	none
MW-29	10/17/2002	327.58	58.46	268.38	0.58
MW-30	10/17/2002	290.67	55.48	234.45	none
MW-31	10/17/2002	368.09	108.54	258.81	none
MW-32	10/17/2002	367.37	112.37	254.26	none
MW-33A	10/17/2002	352.06	101.41	249.95	none
MW-34	10/17/2002	351.81	102.49	248.58	none
MW-35	10/17/2002	351.06	102.91	247.41	none
MW-36	10/17/2002	333.26	103.56	228.96	none
MW-37	10/17/2002	285.33	56.07	228.52	none
MW-38	10/17/2002	310.83	81.51	228.58	none
MW-39	10/17/2002	341.81	94.61	246.46	none
MW-40	10/17/2002	347.85	94.93	252.92	none
MW-41	10/17/2002	347.91	89.38	258.53	none
MW-42	10/17/2002	345.57	93.40	252.17	none
MW-43A	10/17/2002	341.15	87.88	253.27	none
MW-44	10/17/2002	340.59	89.28	251.31	none
MW-45	10/17/2002	308.05	55.50	252.55	none

TABLE 2B
SUMMARY OF GROUNDWATER GAUGING MEASUREMENTS: OCTOBER 2002

Former Ingersoll Rand Facility
Phillipsburg, New Jersey

WELL ID	DATE	CASING ELEVATION (ft-AMSL)	DEPTH TO WATER (ft)	GW ELEVATION (ft- AMSL)	PRODUCT THICKNESS (ft)
Old- WW	10/17/2002	350	101.24	252.77	none
RW-01	10/17/2002	351.54	88.62	262.92	none
RW-02	10/17/2002	360.46	92.35	268.11	0.36
RW-03	10/17/2002	350.2	92.22	257.98	0.17
RW-04	10/17/2002	362.96	111.02	251.94	none
RW-05	10/17/2002	359.66	101.16	258.50	0.12
RW-06	10/17/2002	358.63	100.34	258.29	0.77
RW-07	10/17/2002	360.11	84.60	275.51	1.64
RW-08	10/17/2002	361.01	102.54	258.48	none
RW-08A	10/17/2002	360.3	102.82	257.48	0.1
RW-09	10/17/2002	363.67	56.79	306.88	0.55
RW-10	10/17/2002	363.14	105.55	257.59	0.16
RW-11	10/17/2002	362.42	64.22	298.20	none
RW-12	10/17/2002	363.16	106.83	256.33	none
RW-13	10/17/2002	360.21	103.27	256.94	0.2
RW-14	10/17/2002	362.07	110.15	251.92	none
RW-15	10/17/2002	362.07	102.68	259.39	none
RW-16	10/17/2002	363.35	111.10	252.25	none
RW-17	10/17/2002	341.8	95.15	246.65	0.4
TH-36	10/17/2002	361.15	61.08	300.07	0.16
TH-BF	10/17/2002	351.16	88.97	262.19	none
TH-by4	10/17/2002	373.37	109.75	263.62	0.53
THWLS	10/17/2002	373.47	109.84	263.63	Sheen

TABLE 2C
SUMMARY OF GROUNDWATER GAUGING MEASUREMENTS: JANUARY 2003
Former Ingersoll Rand Facility
Phillipsburg, New Jersey

WELL ID	DATE	CASING ELEVATION (ft- AMSL)	DEPTH TO WATER (ft)	GW ELEVATION (ft-AMSL)	PRODUCT THICKNESS (ft)
MW-01	1/27/03	363.72	104.72	259.00	none
MW-02A	1/27/03	354.33	96.21	258.12	none
MW-03	1/27/03	339.68	83.14	256.54	none
MW-04	1/27/03	317.20	87.14	230.06	none
MW-05			Not Measured		
MW-06	1/27/03	350.39	99.20	251.19	none
MW-08	1/27/03	363.63	86.75	276.88	none
MW-09	1/27/03	347.12	82.80	264.32	none
MW-10	1/27/03	356.22	81.62	274.60	none
MW-11	1/27/03	364.25	85.51	278.74	none
MW-12	1/27/03	364.15	105.05	259.06	0.05
MW-13	1/27/03	359.58	99.57	260.01	none
MW-15	1/27/03	362.72	104.99	257.73	none
MW-16	1/27/03	363.66	93.69	269.97	none
MW-17	1/27/03	324.39	65.69	258.70	none
MW-18	1/27/03	347.63	88.31	259.32	none
MW-19	1/27/03	340.66	97.47	243.19	none
MW-20	1/27/03	333.58	73.90	259.68	none
MW-21	1/27/03	355.85	85.06	270.79	none
MW-24	1/27/03	362.77	105.78	256.99	none
MW-25	1/27/03	319.66	72.25	247.21	0.24
MW-26	1/27/03	318.76	67.00	251.76	Sheen
MW-27	1/27/03	352.54	90.45	261.36	none
MW-28A	1/27/03	344.27	54.80	288.25	0.56
MW-29	1/27/03	327.58	74.04	252.80	none
MW-30	1/27/03	290.67	57.81	232.12	none
MW-31	1/27/03	368.09	102.69	264.66	none
MW-32	1/27/03	367.37	106.28	260.35	none
MW-33A	1/27/03	352.06	94.95	256.41	none
MW-34	1/27/03	351.81	96.90	254.17	none
MW-35	1/27/03	351.06	97.26	253.06	none
MW-36	1/27/03	333.26	101.66	230.86	none
MW-37	1/27/03	285.33	54.92	229.67	none
MW-38	1/27/03	310.83	80.53	229.56	none
MW-39	1/27/03	341.81	80.48	260.59	none
MW-40	1/27/03	347.85	88.60	259.25	none
MW-41	1/27/03	347.91	84.13	263.78	none
MW-42	1/27/03	345.57	86.30	259.27	none
MW-43A	1/27/03	341.15	81.00	260.15	none
MW-44	1/27/03	340.59	82.65	257.94	none
MW-45	1/27/03	308.05	49.59	258.46	none

TABLE 2C
SUMMARY OF GROUNDWATER GAUGING MEASUREMENTS: JANUARY 2003
Former Ingersoll Rand Facility
Phillipsburg, New Jersey

WELL ID	DATE	CASING ELEVATION (ft- AMSL)	DEPTH TO WATER (ft)	GW ELEVATION (ft-AMSL)	PRODUCT THICKNESS (ft)
Old-WW	1/27/03	350.00	94.85	252.27	none
WW-1P			Not Measured		
RW-01	1/27/03	351.54	83.45	267.89	0.24
RW-02	1/27/03	360.46	90.33	270.10	0.03
RW-03	1/27/03	350.20	78.15	272.05	none
RW-04	1/27/03	362.96	104.64	258.21	0.13
RW-05	1/27/03	359.66	92.01	266.34	1.54
RW-06	1/27/03	358.63	91.71	265.38	1.81
RW-07	1/27/03	360.11	86.86	273.25	Sheen
RW-08	1/27/03	361.01	98.36	261.47	1.39
RW-08A	1/27/03	360.30	102.21	251.88	7.31
RW-09	1/27/03	363.67	61.89	301.63	0.18
RW-10	1/27/03	363.14	91.54	271.60	none
RW-11	1/27/03	362.42	65.48	296.94	none
RW-12	1/27/03	363.16	101.98	261.18	0.2
RW-13	1/27/03	360.21	100.08	260.13	none
RW-14	1/27/03	362.07	104.07	258.00	none
RW-15	1/27/03	362.07	89.03	273.04	none
RW-16	1/27/03	363.35	105.37	256.71	1.49
RW-17	1/27/03	341.80	88.52	252.51	0.91
TH-36	1/27/03	361.15	67.00	237.20	none
TH-BF	1/27/03	351.16	81.50	269.20	0.54
TH-by4	1/27/03	373.37	103.41	269.87	0.11
THWLS			Not Measured		

TABLE 2D
SUMMARY OF GROUNDWATER GAUGING MEASUREMENTS:APRIL 2003
Former Ingersoll Rand Facility
Phillipsburg, New Jersey

WELL ID	DATE	CASING ELEVATION (ft- AMSL)	DEPTH TO WATER (ft)	GW ELEVATION (ft-AMSL)	PRODUCT THICKNESS (ft)
MW-01	4/22/03	363.72	101.31	262.41	none
MW-02A	4/22/03	354.33	95.57	258.76	none
MW-03	4/22/03	339.68	80.50	259.18	none
MW-04	4/22/03	317.2	85.41	231.79	none
MW-05			Not Measured		
MW-06	4/22/03	350.39	96.09	254.30	none
MW-08	4/22/03	363.63	86.25	277.38	none
MW-09	4/22/03	347.12	77.26	269.86	none
MW-10	4/22/03	356.22	78.31	277.91	none
MW-11	4/22/03	364.25	80.24	284.01	none
MW-12	4/22/03	364.15	101.46	262.69	0.03
MW-13	4/22/03	359.58	97.20	262.38	none
MW-15	4/22/03	362.72	101.40	261.32	none
MW-16	4/22/03	363.66	89.13	274.53	none
MW-17	4/22/03	324.39	62.54	261.85	none
MW-18	4/22/03	347.63	85.15	262.48	none
MW-19	4/22/03	340.66	94.26	246.40	none
MW-20	4/22/03	333.58	72.20	261.38	none
MW-21	4/22/03	355.85	82.63	273.22	none
MW-24	4/22/03	362.77	102.41	260.36	none
MW-25	4/22/03	319.66	69.39	250.27	0.1
MW-26	4/22/03	318.76	61.96	256.80	none
MW-27	4/22/03	352.54	88.20	264.34	none
MW-28A	4/22/03	344.27	49.87	294.40	0.64
MW-29	4/22/03	327.58	71.95	255.63	none
MW-30	4/22/03	290.67	58.37	232.30	none
MW-31	4/22/03	368.09	98.95	269.14	none
MW-32	4/22/03	367.37	102.44	264.93	none
MW-33A	4/22/03	352.06	91.90	260.16	none
MW-34	4/22/03	351.81	94.09	257.72	none
MW-35	4/22/03	351.06	94.27	256.79	none
MW-36	4/22/03	333.26	98.81	234.45	none
MW-37	4/22/03	285.33	53.91	231.42	none
MW-38	4/22/03	310.83	78.03	232.80	none
MW-39	4/22/03	341.81	75.87	265.94	none
MW-40	4/22/03	347.85	85.06	262.79	none
MW-41	4/22/03	347.91	80.04	267.87	none
MW-42	4/22/03	345.57	82.70	262.87	none
MW-43A	4/22/03	341.15	77.57	263.58	none
MW-44	4/22/03	340.59	79.42	261.17	none
MW-45	4/22/03	308.05	45.84	262.21	none

TABLE 2D
SUMMARY OF GROUNDWATER GAUGING MEASUREMENTS:APRIL 2003
Former Ingersoll Rand Facility
Phillipsburg, New Jersey

WELL ID	DATE	CASING ELEVATION (ft- AMSL)	DEPTH TO WATER (ft)	GW ELEVATION (ft-AMSL)	PRODUCT THICKNESS (ft)
Old-WW	4/22/03	350	91.20	258.80	none
WW-1P			Not Measured		
RW-01	4/22/03	351.54	79.20	272.34	1.35
RW-02	4/22/03	360.46	86.96	273.50	0.46
RW-03	4/22/03	350.2	74.01	276.19	none
RW-04	4/22/03	362.96	101.34	261.62	0.58
RW-05	4/22/03	359.66	88.35	271.31	1.56
RW-06	4/22/03	358.63	88.09	270.54	1.89
RW-07	4/22/03	360.11	83.00	277.11	0.05
RW-08	4/22/03	361.01	93.69	267.32	0.63
RW-08A	4/22/03	360.3	102.90	257.40	12.59
RW-09	4/22/03	363.67	56.95	306.72	0.23
RW-10	4/22/03	363.14	84.80	278.34	none
RW-11	4/22/03	362.42	58.00	304.42	none
RW-12	4/22/03	363.16	98.61	264.55	0.18
RW-13	4/22/03	360.21	96.67	263.54	none
RW-14	4/22/03	362.07	100.25	261.82	none
RW-15	4/22/03	362.07	85.76	276.31	none
RW-16	4/22/03	363.35	101.64	261.71	1.32
RW-17	4/22/03	341.8	86.85	254.95	1.85
TH-36	4/22/03	361.15	62.75	298.40	none
TH-BF	4/22/03	351.16	76.90	274.26	0.5
TH-by4	4/22/03	373.37	99.32	274.05	0.12
THWLS	4/22/03	373.47	99.76	273.71	none

Table 2E
SUMMARY OF GROUNDWATER GAUGING MEASUREMENTS: JULY 2003
Former Ingersoll Rand Facility
Phillipsburg, New Jersey

WELL ID	DATE	CASING ELEVATION (ft- AMSL)	DEPTH TO WATER (ft)	GW ELEVATION (ft-AMSL)	PRODUCT THICKNESS (ft)
MW-01	7/21/03	363.72	101.67	262.05	none
MW-02A	7/21/03	354.33	94.86	259.47	none
MW-03	7/21/03	339.68	79.72	259.96	none
MW-04	7/21/03	317.2	85.42	231.78	none
MW-05			Not Measured		
MW-06	7/21/03	350.39	95.62	254.77	none
MW-08	7/21/03	363.63	87.69	275.94	none
MW-09	7/21/03	347.12	78.54	268.58	none
MW-10	7/21/03	356.22	78.68	277.54	none
MW-11	7/21/03	364.25	84.25	280	none
MW-12	7/21/03	364.15	100.52	263.63	0.05
MW-13	7/21/03	359.58	96.31	263.27	none
MW-15	7/21/03	362.72	100.36	262.36	none
MW-16	7/21/03	363.66	93.65	270.01	none
MW-17	7/21/03	324.39	61.55	262.84	none
MW-18	7/21/03	347.63	83.98	263.65	none
MW-19	7/21/03	340.66	92.67	247.99	none
MW-20	7/21/03	333.58	70.82	262.76	none
MW-21	7/21/03	355.85	81.39	274.46	none
MW-24	7/21/03	362.77	101.79	260.98	none
MW-25	7/21/03	319.66	72.93	246.73	0.08
MW-26	7/21/03	318.76	71.62	247.14	none
MW-27	7/21/03	352.54	87.23	265.31	none
MW-28A	7/21/03	344.27	54	290.27	0.68
MW-29	7/21/03	327.58	73.91	253.67	none
MW-30	7/21/03	290.67	54.22	236.45	none
MW-31	7/21/03	368.09	98.56	269.53	none
MW-32	7/21/03	367.37	101.39	265.98	none
MW-33A	7/21/03	352.06	91.1	260.96	none
MW-34	7/21/03	351.81	93.52	258.29	none
MW-35	7/21/03	351.06	93.79	257.27	none
MW-36	7/21/03	333.26	99.27	233.99	none
MW-37	7/21/03	285.33	54.03	231.3	none
MW-38			Not Measured		
MW-39	7/21/03	341.81	75.6	266.21	none
MW-40	7/21/03	347.85	83.99	263.86	none
MW-41	7/21/03	347.91	80.22	267.69	none
MW-42	7/21/03	345.57	81.31	264.26	none
MW-43A	7/21/03	341.15	76.41	264.74	none
MW-44	7/21/03	340.59	78.65	261.94	none
MW-45	7/21/03	308.05	44.69	263.36	none

Table 2E
SUMMARY OF GROUNDWATER GAUGING MEASUREMENTS: JULY 2003
Former Ingersoll Rand Facility
Phillipsburg, New Jersey

WELL ID	DATE	CASING ELEVATION (ft- AMSL)	DEPTH TO WATER (ft)	GW ELEVATION (ft-AMSL)	PRODUCT THICKNESS (ft)
MW-46	7/21/03	374.4	110.7	263.7	none
MW-47	7/21/03	361.67	97.4	264.27	none
MW-48	7/21/03	327	95.72	231.28	none
MW-49	7/21/03	230.74	4.27	226.47	none
MW-50	7/21/03	346.22	91.13	255.09	none
MW-51			Not Measured		
MW-52	7/21/03	360.29	99.03	261.26	none
MW-53	7/21/03	357	120.85	236.15	none
Old-WW	7/21/03	350	90.11	259.89	none
RW-01	7/21/03	351.54	79.08	272.46	none
RW-02	7/21/03	360.46	87.68	272.78	0.43
RW-03	7/21/03	350.2	74.86	275.34	none
RW-04	7/21/03	362.96	99.86	263.1	0.24
RW-05	7/21/03	359.66	87.31	272.35	0.22
RW-06	7/21/03	358.63	87.01	271.62	2.99
RW-07	7/21/03	360.11	87.02	273.09	none
RW-08	7/21/03	361.01	94.06	266.95	none
RW-08A	7/21/03	360.3	92.2	268.1	0.38
RW-09	7/21/03	363.67	58.61	305.06	0.19
RW-10	7/21/03	363.14	89.28	273.86	none
RW-11	7/21/03	362.42	60.03	302.39	none
RW-12	7/21/03	363.16	98.06	265.1	0.18
RW-13	7/21/03	360.21	96.28	263.93	none
RW-14	7/21/03	362.07	99.17	262.9	none
RW-15	7/21/03	362.07	86.65	275.42	none
RW-16	7/21/03	363.35	99.54	263.81	1.35
RW-17	7/21/03	341.8	83.78	258.02	0.28
TH-36	7/21/03	361.15	66.58	294.57	none
TH-BF	7/21/03	351.16	78.46	272.7	0.49
TH-by4	7/21/03	373.37	98.52	274.85	0.15
THWLS	7/21/03	373.47	98.98	274.49	none
WW1P	7/21/03	350	86.95	263.05	none

Table 3A
SAMPLE SUMMARY: OCTOBER 2002
Former Ingersoll Rand Facility
Phillipsburg, New Jersey

Sample ID	Date	Time	Duplicate	Sample Depth ⁽¹⁾	Lab Job No.	Analysis	Non Conformance
Conventional Groundwater Samples							
MW-18	10/21/02	14:15	N	95.6	B887	VO+10	---
MW-20	10/21/02	12:55	N	104.3	B887	VO+10	---
MW13	10/22/02	13:25	N	107.5	C019	VO+10	---
MW19	10/22/02	10:10	N	104.3	C019	VO+10	---
MW03	10/23/02	12:50	N	91	C019	VO+10	---
MW36	10/23/02	14:45	N	104.2	C019	VO+10, Arsenic, and Lead	---
RW11	10/23/02	10:13	N	64.8	C019	Chromium	---
MW30	10/24/02	9:15	N	60	C100	Arsenic and Lead	---
MW39	10/24/02	12:00	N	93.5	C100	VO+10, Arsenic, Chromium, and Lead	---
MW39P	10/24/02	12:05	Y	93.5	C100	VO+10, Arsenic, Chromium, and Lead	---
RW10	10/24/02	15:30	N	104.2	C100	VO+10	---
TH36	10/24/02	16:55	N	67.1	C100	Arsenic and Lead	---
Low Flow Ground Water Samples							
MW-27	10/28/02	12:10	N	98.2	C161	VO+10	---
THWLS	10/28/02	10:35	N	110.2	C161	VO+10	---
MW08	10/29/02	14:45	N	92.8	C227	VO+10	---
MW25	10/29/02	9:40	N	77.3	C227	VO+10	---
RW03	10/29/02	12:05	N	92	C227	VO+10	---
MW10	10/30/02	13:35	N	94	C266	VO+10	---
RW15	10/30/02	8:40	N	102.4	C266	VO+10	---
THby4	10/30/02	11:00	N	110.5	C266	VO+10	---
Passive Defusion Bag Samples							
MW02AA	10/15/02	10:10	N	112	B707	VO+10	(2)
MW02AP	10/15/02	10:15	N	112	B707	VO+10	(2)
MW04A	10/15/02	8:40	N	96	B707	VO+10	(2)
MW04B	10/15/02	8:45	N	108	B707	VO+10	(2)
MW04C	10/15/02	8:50	N	120	B707	VO+10	(2)
MW06A	10/15/02	9:35	N	110	B707	VO+10	(2)
MW06B	10/15/02	9:40	N	145	B707	VO+10	(2)
MW06C	10/15/02	9:45	N	187	B707	VO+10	(2)
MW15A	10/15/02	11:30	N	120	B707	VO+10	(2)
MW15B	10/15/02	11:35	N	135	B707	VO+10	(2)

Notes:

(1) - Sample Depths are reported in feet below top of well casing. For conventional samples, depth refers to the static water level gauged prior to purging.

For Passive Diffusion Bag samples, the sample depth reported is the PDB deployment depth.

(2) - 1,1-Dichloroethane (3.1 ug/L) and TIC (25 ug/L) were both detected in the field blank.

VO+10 = Volatile Organic Compounds with a 10 forward library search via EPA Method 624

BN +15 = Base Neutral Organic compounds with a 15 forward library search via EPA Method 625

TPHC = Total Petroleum Hydrocarbons via EPA Method 418.1

TCE = Trichloroethylene

QL = Quality Control Limits

MS = Matrix Spike

Arsenic, chromium, and lead were analyzed via EPA Methods 6010B and 200.7.

Table 3A
SAMPLE SUMMARY: OCTOBER 2002
Former Ingersoll Rand Facility
Phillipsburg, New Jersey

Sample ID	Date	Time	Duplicate	Sample Depth ⁽¹⁾	Lab Job No.	Analysis	Non Conformance
Passive Defusion Bag Samples (Continued)							
MW32A	10/15/02	11:00	N	118	B707	VO+10	(2)
MW32B	10/15/02	11:05	N	129	B707	VO+10	(2)
MW33AA	10/15/02	9:50	N	107	B707	VO+10	(2)
MW33AB	10/15/02	9:55	N	120	B707	VO+10	(2)
MW34A	10/15/02	9:30	N	108	B707	VO+10	(2)
MW34B	10/15/02	9:35	N	113	B707	VO+10	(2)
MW34C	10/15/02	9:40	N	120	B707	VO+10	(2)
MW35A	10/15/02	9:10	N	128	B707	VO+10	(2)
MW35B	10/15/02	9:15	N	137	B707	VO+10	(2)
MW37A	10/15/02	8:10	N	60	B707	VO+10	(2)
MW37B	10/15/02	8:15	N	86	B707	VO+10	(2)
MW37C	10/15/02	8:20	N	98	B707	VO+10	(2)
RW09A	10/15/02	14:25	N	90	B707	VO+10	(2)
RW09B	10/15/02	14:30	N	118	B707	VO+10	(2)
RW09C	10/15/02	14:35	N	147	B707	VO+10	(2)
RW09D	10/15/02	14:40	N	170	B707	VO+10	(2)
RW09E	10/15/02	14:45	N	193	B707	VO+10	(2)
RW14A	10/15/02	11:10	N	118	B707	VO+10	(2)
RW14B	10/15/02	11:15	N	155	B707	VO+10	(2)
RW15A	10/15/02	13:55	N	113	B707	VO+10	(2)
RW15B	10/15/02	14:00	N	135	B707	VO+10	(2)
RW15C	10/15/02	14:05	N	156	B707	VO+10	(2)
RW16A	10/15/02	13:15	N	120	B707	VO+10	(2)
RW16B	10/15/02	13:20	N	141.5	B707	VO+10	(2)
MW16A	10/16/02	8:25	N	130	B707	VO+10	(2)
MW16B	10/16/02	8:30	N	155	B707	VO+10	(2)
MW16C	10/16/02	8:35	N	190	B707	VO+10	(2)
RW11A	10/16/02	7:35	N	115	B707	VO+10	(2)
RW11B	10/16/02	7:40	N	170	B707	VO+10	(2)
RW13A	10/16/02	8:10	N	115	B707	VO+10	(2)
RW13B	10/16/02	8:15	N	165	B707	VO+10	(2)
TH36A	10/16/02	8:50	N	110	B707	VO+10	(2)
TH36P	10/16/02	8:55	Y	110	B707	VO+10	(2)

Notes:

(1) - Sample Depths are reported in feet below top of well casing. For conventional samples, depth refers to the static water level gauged prior to purging. For Passive Diffusion Bag samples, the sample depth reported is the PDB deployment depth.

(2) -1,1-Dichloroethane (3.1 ug/L) and TIC (25 ug/L) were both detected in the field blank.

VO+10 = Volatile Organic Compounds with a 10 forward library search via EPA Method 624

BN +15 = Base Neutral Organic compounds with a 15 forward library search via EPA Method 625

TPHC = Total Petroleum Hydrocarbons via EPA Method 418.1

TCE = Trichloroethylene

QL = Quality Control Limits

MS = Matrix Spike

Arsenic, chromium, and lead were analyzed via EPA Methods 6010B and 200.7.

Table 3B
SAMPLE SUMMARY: APRIL 2003
Former Ingersoll Rand Facility
Phillipsburg, New Jersey

Sample ID	Date	Time	Duplicate	Sample Depth ⁽¹⁾	Lab Job No.	Analysis	NonConformance
Conventional Groundwater Samples							
MW04	4/24/03	10:40	N	85.8	I179	Arsenic Total and Dissolved	---
MW36	4/24/03	15:20	N	99	I179	Arsenic and Lead, Total and Dissolved	---
MW02A	4/25/03	10:15	N	95.9	I179	VO+10	---
MW15	4/25/03	15:10	N	101.3	I179	VO+10	---
MW39	4/25/03	12:10	N	76	I179	VO+10	---
MW06	4/28/03	11:40	N	96.6	I225	VO+10	---
RW10	4/28/03	14:40	N	86.4	I225	VO+10	---
MW01	4/29/03	15:30	N	101.8	I319	VO+10	(2)
MW30	4/29/03	12:10	N	56.6	I319	VO+10, Arsenic Total and Dissolved	(2)
MW30P	4/29/03	12:15	Y	56.6	I319	VO+10, Arsenic and Lead, Total and Dissolved	(2)
TH36	4/29/03	10:20	N	63.6	I319	Arsenic and Lead, Total and Dissolved	(2)
MW18	4/30/03	10:15	N	85.8	I319	VO+10	(2)
MW20	4/30/03	13:55	N	33.3	I319	VO+10	(2)
MW13	5/1/2003	16:20	N	98.2	I428	VO+10	---
MW24	5/1/2003	11:20	N	163.2	I428	VO+10	---
MW27	5/1/2003	12:50	N	89.1	I428	VO+10	---
MW12	5/2/2003	13:30	N	102.2	I428	VO+10	---
MW19	5/2/2003	11:10	N	95.7	I428	VO+10	---
MW26	5/5/2003	11:45	N	65.5	I445	VO+10	---
Low Flow Ground Water Samples							
RW11	4/28/03	16:10	N	60.9	I225	Chromium, Total and Dissolved	---
RW09	4/30/03	15:00	N	57.8	I319	Arsenic and Lead, Total and Dissolved	---
Passive Diffusion Bag Samples							
MW04A	4/23/03	9:00	N	96	I079	VO+10	(3)
MW04B	4/23/03	9:05	N	108	I079	VO+10	(3)
MW04C	4/23/03	9:10	N	120	I079	VO+10	(3)
MW16A	4/23/03	11:05	N	130	I079	VO+10	(3)
MW16B	4/23/03	11:10	N	155	I079	VO+10	(3)
MW16C	4/23/03	11:15	N	190	I079	VO+10	(3)
MW32A	4/23/03	11:45	N	118	I079	VO+10	(3)
MW32B	4/23/03	11:50	N	129	I079	VO+10	(3)
MW32P	4/23/03	11:55	Y	129	I079	VO+10	(3)
MW33AA	4/23/03	10:30	N	107	I079	VO+10	(3)
MW33AB	4/23/03	10:35	N	120	I079	VO+10	(3)

Notes:

- (1) - Sample Depths are reported in feet below top of well casing. For conventional samples, depth refers to the static water level gauged prior to purging. For Passive Diffusion Bag samples, the sample depth reported is the PDB deployment depth.
- (2) - Samples delivered on April 30, 2003 reported a cooler temperature of 9°C.
- (3) -Methylene Chloride (1.5 ug/L) was detected in the trip blank. 1,1-Dichloroethane (7.1 ug/L), Toluene (0.2 ug/L), and TIC (29 ug/L) were detected the field blank. The cooler had a reported temperature of 11oC.
- VO+10 = Volatile Organic Compounds with a 10 forward library search via EPA Method 624
- TPHC = Total Petroleum Hydrocarbons via EPA Method 418.1
- TCE = Trichloroethylene
- QL = Quality Control Limits
- MS = Matrix Spike
- Arsenic, chromium, and lead were analyzed via EPA Methods 6010B and 200.7.

Table 3B
SAMPLE SUMMARY: APRIL 2003
Former Ingersoll Rand Facility
Phillipsburg, New Jersey

Sample ID	Date	Time	Duplicate	Sample Depth ⁽¹⁾	Lab Job No.	Analysis	NonConformance
MW34A	4/23/03	10:10	N	108	I079	VO+10	(3)
MW34B	4/23/03	10:15	N	113	I079	VO+10	(3)
MW34C	4/23/03	10:20	N	120	I079	VO+10	(3)
MW35A	4/23/03	9:55	N	122	I079	VO+10	(3)
MW35B	4/23/03	10:00	N	128	I079	VO+10	(3)
MW37A	4/23/03	9:15	N	60	I079	VO+10	(3)
MW37B	4/23/03	9:20	N	86	I079	VO+10	(3)
MW37C	4/23/03	9:25	N	98	I079	VO+10	(3)
RW09A	4/23/03	12:10	N	90	I079	VO+10	(3)
RW09B	4/23/03	12:15	N	118	I079	VO+10	(3)
RW09C	4/23/03	12:20	N	147	I079	VO+10	(3)
RW09D	4/23/03	12:25	N	160	I079	VO+10	(3)
RW09E	4/23/03	12:30	N	188	I079	VO+10	(3)
RW11A	4/23/03	15:45	N	115	I079	VO+10	(3)
RW11B	4/23/03	15:50	N	170	I079	VO+10	(3)
RW13A	4/23/03	10:50	N	115	I079	VO+10	(3)
RW13B	4/23/03	10:55	N	165	I079	VO+10	(3)
RW14A	4/23/03	11:30	N	118	I079	VO+10	(3)
RW14B	4/23/03	11:35	N	165	I079	VO+10	(3)
RW15A	4/23/03	14:10	N	113	I079	VO+10	(3)
RW15B	4/23/03	14:15	N	135	I079	VO+10	(3)
RW15C	4/23/03	14:20	N	156	I079	VO+10	(3)
RW16A	4/23/03	14:35	N	121	I079	VO+10	(3)
RW16B	4/23/03	14:40	N	141.5	I079	VO+10	(3)
TH36A	4/23/03	16:20	N	110	I079	VO+10	(3)
TH36P	4/23/03	16:25	Y	110	I079	VO+10	(3)
THWLSA	4/23/03	13:50	N	110	I079	VO+10	(3)
THWLSB	4/23/03	13:55	N	123	I079	VO+10	(3)
New Wells Conventional							
MW50	7/22/03	13:35	N	91.1	L530	VO+10	---
MW52	7/23/03	15:15	N	97.7	L530	VO+10, TPHC	---
MW53	7/23/03	10:40	N	118.9	L530	VO+10, TPHC	---
MW53P	7/23/03	10:45	Y	118.9	L530	VO+10	---
MW46	7/24/03	9:45	N	108.5	L530	VO+10	---
MW48	7/24/03	16:40	N	94.4	L530	VO+10	---
MW49	7/24/03	12:45	N	3.7	L530	VO+10	---
MW47	7/25/03	10:40	N	94.6	L530	VO+10	---

Notes:

(1) - Sample Depths are reported in feet below top of well casing. For conventional samples, depth refers to the static water level gauged prior to purging. For Passive Diffusion Bag samples, the sample depth reported is the PDB deployment depth.

(2) - Samples delivered on April 30, 2003 reported a cooler temperature of 9°C.

(3) -Methylene Chloride (1.5 ug/L) was detected in the trip blank. 1,1-Dichloroethane (7.1 ug/L), Toluene (0.2 ug/L), and TIC (29 ug/L) were detected in the field blank. The cooler had a reported temperature of 11°C.

VO+10 = Volatile Organic Compounds with a 10 forward library search via EPA Method 624

TPHC = Total Petroleum Hydrocarbons via EPA Method 418.1

TCE = Trichloroethylene

QL = Quality Control Limits

MS = Matrix Spike

Arsenic, chromium, and lead were analyzed via EPA Methods 6010B and 200.7.

TABLE 4
SUMMARY OF PASSIVE DIFFUSION BAG ANALYTICAL RESULTS
Former Ingersoll Rand Facility
Phillipsburg, New Jersey

Field ID			MW02AA	MW02AP	MW04A		MW04B		MW04C		MW06A	MW06B	MW06C	MW15A	MW15B
Lab ID			383782	383783	383772	423938	383773	423939	383774	423940	383784	383785	383786	383791	383792
Depth			112	112	96	96	108	108	120	120	110	145	187	120	135
Sample Date			10/15/02	10/15/02	10/15/02	04/23/03	10/15/02	04/23/03	10/15/02	04/23/03	10/15/02	10/15/02	10/15/02	10/15/02	10/15/02
Sample Time			10:10	10:15	8:40	9:00	8:45	9:05	8:50	9:10	9:35	9:40	9:45	11:30	11:35
Volatiles Organic Compounds (VOCs) (via EPA Method 624)															
	CAS_RN	GWQS													
1,1,1-Trichloroethane	71-55-6	30	12	13	1	1.4	1	1.5	1	1.6	55	60	43	3.2	2.9
1,1,2,2-Tetrachloroethane	79-34-5	1	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U
1,1,2-Trichloroethane	79-00-5	3	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U
1,1-Dichloroethane	75-34-3	50	(0.3) U	(0.3) U	3	(0.2) U	3.2	1.2	3.4	1.7	21	23	16	5	5.3
1,1-Dichloroethene	75-35-4	2	1.7	1.9	0.9	(0.4) U	0.8	(0.4) U	0.8	(0.4) U	4.2	4.8	4.5	1	1.1
1,2-Dichloroethane	107-06-2	2	(0.4) U	(0.4) U	(0.4) U	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U
1,2-Dichloropropane	78-87-5	1	(0.4) U	(0.4) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U
2-Chloroethyl Vinyl Ether	110-75-8	100	(0.5) U	(0.5) U	(0.5) U	(0.4) U	(0.5) U	(0.4) U	(0.5) U	(0.4) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U
Benzene	71-43-2	1	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U
Bromodichloromethane	75-27-4	1	(0.2) U	(0.2) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U
Bromoform	75-25-2	4	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U
Bromomethane	74-83-9	10	(0.3) U	(0.3) U	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U
Carbon tetrachloride	56-23-5	2	(0.3) U	(0.3) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U
Chlorobenzene	108-90-7	50	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U
Chloroethane	75-00-3	100	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U
Chloroform	67-66-3	6	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	0.3	0.3
Chloromethane	74-87-3	30	(0.4) U	(0.4) U	(0.4) U	(0.5) U	(0.4) U	(0.5) U	(0.4) U	(0.5) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U
cis-1,2-Dichloroethene	156-59-2	70	(0.3) U	(0.3) U	100	0.6	110	1.3	120	12	(0.3) U	(0.3) U	(0.3) U	5.8	5.7
cis-1,3-Dichloropropene	10061-01-5	NA	(0.3) U	(0.3) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U
Dibromochloromethane	124-48-1	10	(0.3) U	(0.3) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U
Ethylbenzene	100-41-4	700	(0.2) U	(0.2) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U
Methylene Chloride	75-09-2	3	(0.9) U	(0.9) U	(0.9) U	(0.8) U	(0.9) U	(0.8) U	(0.9) U	(0.8) U	(0.9) U	(0.9) U	(0.9) U	(0.9) U	(0.9) U
Tetrachloroethene	127-18-4	1	(0.2) U	(0.2) U	7.6	(0.3) U	7.9	0.5	7.5	4	1	0.6	0.6	0.3	(0.2) U
Toluene	108-88-3	1000	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U
Total Xylenes	1330-20-7	1000	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U
Trans-1,2-Dichloroethene	156-60-5	100	(0.2) U	(0.2) U	0.6	(0.2) U	0.5	(0.2) U	0.6	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U
Trans-1,3-Dichloropropene	10061-02-6	NA	(0.3) U	(0.3) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U
Trichloroethylene	79-01-6	1	(0.1) U	0.4	31	(0.2) U	32	0.5	33	4.9	4.4	4.8	3.8	1.2	1.2
Trichlorofluoromethane	75-69-4	2000	1	1.1	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U
Vinyl Chloride	75-01-4	5	(0.3) U	(0.3) U	43	(0.5) U	47	(0.5) U	49	(0.5) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U
Total VOCs	---	---	14.7	16.4	187.1	2	202.4	5	215.3	24.2	85.6	93.2	67.9	16.8	16.5
Total TIC	---	100/500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

NOTES:

All results are reported in micrograms per liter (µg/L).

Depths are reported in feet (ft) below top of well casing.

Sample IDs ending in "P" indicate that it is a duplicate sample.

CAS_RN = Chemical Abstracts Service Registry Number

NJDEP GWQS = New Jersey Department of Environmental

Protection Groundwater Quality Standards

TICs = Tentatively Identified Compounds

U - Indicates that the analyte was not detected at the Method

Detection Limit (MDL) shown in parenthesis.

ND = Not Detected

Bold indicates that the concentration exceeds the NJDEP GWQS

TABLE 4
SUMMARY OF PASSIVE DIFFUSION BAG ANALYTICAL RESULTS
Former Ingersoll Rand Facility
Phillipsburg, New Jersey

Field ID	MW16A		MW16B		MW16C		MW32A		MW32B		MW32P	MW33AA			
Lab ID	383808	423953	383809	423954	383810	423955	383787	423958	383788	423959	423978	383780	423949		
Depth	130	130	155	155	190	190	118	118	129	129	129	107	107		
Sample Date	10/16/02	04/23/03	10/16/02	04/23/03	10/16/02	04/23/03	10/15/02	04/23/03	10/15/02	04/23/03	04/23/03	10/15/02	04/23/03		
Sample Time	8:25	11:05	8:30	11:10	8:35	11:15	11:00	11:45	11:05	11:50	11:55	9:50	10:30		
Volitale Organic Compounds (VOCs) (via EPA Method 624)															
CAS_RN	GWQS														
1,1,1-Trichloroethane	71-55-6	30	7.8	6.9	5.8	2.8	4	4.8	7.6	3.1	8	3.5	3.2	7.5	4.9
1,1,2,2-Tetrachloroethane	79-34-5	1	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U
1,1,2-Trichloroethane	79-00-5	3	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U
1,1-Dichloroethane	75-34-3	50	6.1	6.6	2.5	3.1	(0.3) U	1.4	12	5.4	13	5.5	5.3	2	(0.2) U
1,1-Dichloroethene	75-35-4	2	3.6	4	2.5	2.2	1.7	1.5	2.5	1.1	2.9	1.2	1.1	5.1	2.9
1,2-Dichloroethane	107-06-2	2	(0.4) U	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(0.3) U	(0.3) U	(0.4) U	(0.3) U
1,2-Dichloropropane	78-87-5	1	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.2) U	(0.4) U	(0.2) U
2-Chloroethyl Vinyl Ether	110-75-8	100	(0.5) U	(0.4) U	(0.5) U	(0.4) U	(0.5) U	(0.4) U	(0.5) U	(0.4) U	(0.5) U	(0.4) U	(0.4) U	(0.5) U	(0.4) U
Benzene	71-43-2	1	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U
Bromodichloromethane	75-27-4	1	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U
Bromoform	75-25-2	4	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U
Bromomethane	74-83-9	10	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(0.3) U
Carbon tetrachloride	56-23-5	2	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.2) U	(0.3) U	(0.2) U
Chlorobenzene	108-90-7	50	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U
Chloroethane	75-00-3	100	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U
Chloroform	67-66-3	6	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	0.4	(0.2) U	0.4	(0.2) U	0.2	(0.2) U	(0.2) U
Chloromethane	74-87-3	30	(0.4) U	(0.5) U	(0.4) U	(0.5) U	(0.4) U	(0.5) U	(0.4) U	(0.5) U	(0.4) U	(0.5) U	(0.5) U	(0.4) U	(0.5) U
cis-1,2-Dichloroethene	156-59-2	70	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	3.7	2	4.5	2.4	2	(0.3) U	(0.2) U
cis-1,3-Dichloropropene	10061-01-5	NA	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.2) U	(0.3) U	(0.2) U
Dibromochloromethane	124-48-1	10	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.2) U	(0.3) U	(0.2) U
Ethylbenzene	100-41-4	700	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U
Methylene Chloride	75-09-2	3	(0.9) U	(0.8) U	(0.9) U	2.7	(0.9) U	(0.8) U	(0.9) U	(0.8) U	(0.9) U	(0.8) U	(0.8) U	(0.9) U	(0.8) U
Tetrachloroethene	127-18-4	1	2.4	1	0.7	(0.3) U	0.5	0.5	0.6	0.5	0.7	0.3	0.5	4.1	3.7
Toluene	108-88-3	1000	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U
Total Xylenes	1330-20-7	1000	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U
Trans-1,2-Dichloroethene	156-60-5	100	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U
Trans-1,3-Dichloropropene	10061-02-6	NA	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.2) U	(0.3) U	(0.2) U
Trichloroethylene	79-01-6	1	0.7	(0.2) U	0.4	(0.2) U	(0.1) U	(0.2) U	2.1	1	2	1.2	0.9	9.4	8
Trichlorofluoromethane	75-69-4	2000	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U
Vinyl Chloride	75-01-4	5	(0.3) U	(0.5) U	(0.3) U	(0.5) U	(0.3) U	(0.5) U	(0.3) U	(0.5) U	(0.3) U	(0.5) U	(0.5) U	(0.3) U	(0.5) U
Total VOCs	---	---	20.6	18.5	11.9	10.8	6.2	8.2	28.9	13.1	31.5	14.1	13.2	28.1	19.5
Total TIC	---	100/500	ND	ND	ND	5.7	ND	ND	ND	ND	ND	ND	ND	ND	ND

NOTES:

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Depths are reported in feet (ft) below top of well casing.
Sample IDs ending in "P" indicate that it is a duplicate sample.
CAS_RN = Chemical Abstracts Service Registry Number
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TICs = Tentatively Identified Compounds
U - Indicates that the analyte was not detected at the Method
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ND = Not Detected
Bold indicates that the concentration exceeds the NJDEP GWQS

TABLE 4
SUMMARY OF PASSIVE DIFFUSION BAG ANALYTICAL RESULTS
Former Ingersoll Rand Facility
Phillipsburg, New Jersey

Field ID	MW33AB		MW34A		MW34B		MW34C		MW35A		MW35B		MW37A			
Lab ID	383781	423950	383777	423946	383778	423947	383779	423948	383775	423944	383776	423945	383769	423941		
Depth	120	120	108	108	113	113	120	120	128	122	137	128	60	60		
Sample Date	10/15/02	04/23/03	10/15/02	04/23/03	10/15/02	04/23/03	10/15/02	04/23/03	10/15/02	04/23/03	10/15/02	04/23/03	10/15/02	04/23/03		
Sample Time	9:55	10:35	9:30	10:10	9:35	10:15	9:40	10:20	9:10	9:55	9:15	10:00	8:10	9:15		
Volatile Organic Compounds (VOCs) (via EPA Method 624)																
CAS_RN	GWQS															
1,1,1-Trichloroethane	71-55-6	30	5.9	3	3.8	2.6	4.4	4.6	5	3.2	140	150	81	88	(0.3) U	(0.2) U
1,1,2,2-Tetrachloroethane	79-34-5	1	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.6) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U
1,1,2-Trichloroethane	79-00-5	3	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.7) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U
1,1-Dichloroethane	75-34-3	50	1.7	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	41	60	22	26	(0.3) U	(0.2) U
1,1-Dichloroethene	75-35-4	2	3.7	1.5	0.9	(0.4) U	1.1	0.6	1	(0.4) U	10	7.4	7.5	5.7	(0.3) U	(0.4) U
1,2-Dichloroethane	107-06-2	2	(0.4) U	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(0.5) U	(0.4) U	(0.3) U	(0.4) U	(0.3) U
1,2-Dichloropropane	78-87-5	1	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.5) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U
2-Chloroethyl Vinyl Ether	110-75-8	100	(0.5) U	(0.4) U	(0.5) U	(0.4) U	(0.5) U	(0.4) U	(0.5) U	(0.4) U	(0.5) U	(0.9) U	(0.5) U	(0.4) U	(0.5) U	(0.4) U
Benzene	71-43-2	1	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.5) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U
Bromodichloromethane	75-27-4	1	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.7) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U
Bromoform	75-25-2	4	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.7) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U
Bromomethane	74-83-9	10	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(0.3) U	(0.9) U	(0.3) U	(0.4) U	(0.3) U	(0.4) U
Carbon tetrachloride	56-23-5	2	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.4) U	(0.3) U	(0.2) U	1.2	1.3
Chlorobenzene	108-90-7	50	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.4) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U
Chloroethane	75-00-3	100	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.9) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U
Chloroform	67-66-3	6	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.4) U	(0.2) U	(0.2) U	0.3	0.3
Chloromethane	74-87-3	30	(0.4) U	(0.5) U	(0.4) U	(0.5) U	(0.4) U	(0.5) U	(0.4) U	(0.5) U	(0.4) U	(0.9) U	(0.4) U	(0.5) U	(0.4) U	(0.5) U
cis-1,2-Dichloroethene	156-59-2	70	(0.3) U	(0.2) U	2.3	0.5	2.4	5.3	5.1	2.2	1.1	(0.5) U	1.2	0.7	(0.3) U	(0.2) U
cis-1,3-Dichloropropene	10061-01-5	NA	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.5) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U
Dibromochloromethane	124-48-1	10	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.5) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U
Ethylbenzene	100-41-4	700	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.7) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U
Methylene Chloride	75-09-2	3	(0.9) U	(0.8) U	(0.9) U	(0.8) U	(0.9) U	(0.8) U	(0.9) U	(0.8) U	(0.9) U	(1.6) U	(0.9) U	(0.8) U	(0.9) U	(0.8) U
Tetrachloroethene	127-18-4	1	3.8	2.1	3.1	0.5	4.1	4.2	5.7	1.6	4.8	3.4	3.1	2.6	(0.2) U	(0.3) U
Toluene	108-88-3	1000	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.3) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U
Total Xylenes	1330-20-7	1000	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.4) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U
Trans-1,2-Dichloroethene	156-60-5	100	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.5) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U
Trans-1,3-Dichloropropene	10061-02-6	NA	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.4) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U
Trichloroethylene	79-01-6	1	7.3	4	4.2	1.8	4.4	7.6	6.5	3.4	14	14	9.9	9.2	17	13
Trichlorofluoromethane	75-69-4	2000	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.8) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U
Vinyl Chloride	75-01-4	5	(0.3) U	(0.5) U	(0.3) U	(0.5) U	(0.3) U	(0.5) U	(0.3) U	(0.5) U	(0.3) U	(1.1) U	(0.3) U	(0.5) U	(0.3) U	(0.5) U
Total VOCs	---	---	22.4	10.6	14.3	5.4	16.4	22.3	23.3	10.4	210.9	234.8	124.7	132.2	18.5	14.6
Total TIC	---	100/500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

NOTES:

All results are reported in micrograms per liter (µg/L).
Depths are reported in feet (ft) below top of well casing.
Sample IDs ending in "P" indicate that it is a duplicate sample.
CAS_RN = Chemical Abstracts Service Registry Number
NJDEP GWQS = New Jersey Department of Environmental
Protection Groundwater Quality Standards
TICs = Tentatively Identified Compounds
U - Indicates that the analyte was not detected at the Method
Detection Limit (MDL) shown in parenthesis.
ND = Not Detected
Bold indicates that the concentration exceeds the NJDEP GWQS

TABLE 4
SUMMARY OF PASSIVE DIFFUSION BAG ANALYTICAL RESULTS
Former Ingersoll Rand Facility
Phillipsburg, New Jersey

Field ID			MW37B		MW37C		RW09A		RW09B		RW09C		RW09D		RW09E	
Lab ID			383770	423942	383771	423943	383798	423960	383799	423961	383800	423962	383801	423963	383802	423964
Depth			86	86	98	98	90	90	118	118	147	147	170	160	193	188
Sample Date			10/15/02	04/23/03	10/15/02	04/23/03	10/15/02	04/23/03	10/15/02	04/23/03	10/15/02	04/23/03	10/15/02	04/23/03	10/15/02	04/23/03
Sample Time			8:15	9:20	8:20	9:25	14:25	12:10	14:30	12:15	14:35	12:20	14:40	12:25	14:45	12:30
Volatile Organic Compounds (VOCs) (via EPA Method 624)																
CAS_RN GWQS																
1,1,1-Trichloroethane			71-55-6	30	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(1.3) U	(0.3) U	(1.3) U	(0.8) U	(1.3) U	(0.8) U	(1.3) U	(0.3) U
1,1,1,2,2-Tetrachloroethane			79-34-5	1	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(1.6) U	(0.6) U	(1.6) U	(1.4) U	(1.6) U	(1.4) U	(1.6) U	(0.6) U
1,1,2-Trichloroethane			79-00-5	3	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(1.4) U	(0.7) U	(1.4) U	(1.7) U	(1.4) U	(1.7) U	(1.4) U	(0.7) U
1,1-Dichloroethane			75-34-3	50	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(1.4) U	(0.5) U	(1.4) U	(1.2) U	(1.4) U	(1.2) U	(1.4) U	(0.5) U
1,1-Dichloroethene			75-35-4	2	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(1.4) U	(0.9) U	(1.4) U	(2.2) U	(1.4) U	(2.2) U	(1.4) U	(0.9) U
1,2-Dichloroethane			107-06-2	2	(0.4) U	(0.3) U	(0.4) U	(0.3) U	(1.8) U	(0.5) U	(1.8) U	(1.3) U	(1.8) U	(1.3) U	(1.8) U	(0.5) U
1,2-Dichloropropane			78-87-5	1	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(1.8) U	(0.5) U	(1.8) U	(1.2) U	(1.8) U	(1.2) U	(1.8) U	(0.5) U
2-Chloroethyl Vinyl Ether			110-75-8	100	(0.5) U	(0.4) U	(0.5) U	(0.4) U	(2.4) U	(0.9) U	(2.4) U	(2.2) U	(2.4) U	(2.2) U	(2.4) U	(0.9) U
Benzene			71-43-2	1	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(1.4) U	(0.5) U	(1.4) U	(1.3) U	(1.4) U	(1.3) U	(1.4) U	(0.5) U
Bromodichloromethane			75-27-4	1	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(1) U	(0.7) U	(1) U	(1.8) U	(1) U	(1.8) U	(1) U	(0.7) U
Bromoform			75-25-2	4	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(1.4) U	(0.7) U	(1.4) U	(1.7) U	(1.4) U	(1.7) U	(1.4) U	(0.7) U
Bromomethane			74-83-9	10	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(1.6) U	(0.9) U	(1.6) U	(2.2) U	(1.6) U	(2.2) U	(1.6) U	(0.9) U
Carbon tetrachloride			56-23-5	2	6.2	4.6	6.5	5.1	(1.5) U	(0.4) U	(1.5) U	(1) U	(1.5) U	(1) U	(1.5) U	(0.4) U
Chlorobenzene			108-90-7	50	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(1) U	(0.4) U	(1) U	(0.9) U	(1) U	(0.9) U	(1) U	(0.4) U
Chloroethane			75-00-3	100	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(2.4) U	(0.9) U	(2.4) U	(2.3) U	(2.4) U	(2.3) U	(2.4) U	(0.9) U
Chloroform			67-66-3	6	0.9	0.7	0.8	0.6	(1.2) U	(0.4) U	(1.2) U	(1) U	(1.2) U	(1) U	(1.2) U	(0.4) U
Chloromethane			74-87-3	30	(0.4) U	(0.5) U	(0.4) U	(0.5) U	(2.2) U	(0.9) U	(2.2) U	(2.3) U	(2.2) U	(2.3) U	(2.2) U	(0.9) U
cis-1,2-Dichloroethene			156-59-2	70	(0.3) U	(0.2) U	(0.3) U	(0.2) U	290	250	420	320	390	300	140	59
cis-1,3-Dichloropropene			10061-01-5	NA	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(1.5) U	(0.5) U	(1.5) U	(1.2) U	(1.5) U	(1.2) U	(1.5) U	(0.5) U
Dibromochloromethane			124-48-1	10	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(1.4) U	(0.5) U	(1.4) U	(1.2) U	(1.4) U	(1.2) U	(1.4) U	(0.5) U
Ethylbenzene			100-41-4	700	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.8) U	(0.7) U	(0.8) U	(1.8) U	(0.8) U	(1.8) U	(0.8) U	(0.7) U
Methylene Chloride			75-09-2	3	(0.9) U	(0.8) U	(0.9) U	(0.8) U	(4.4) U	(1.6) U	(4.4) U	(4) U	(4.4) U	(4) U	(4.4) U	(1.6) U
Tetrachloroethene			127-18-4	1	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(1.2) U	2	(1.2) U	1.9	(1.2) U	1.6	(1.2) U	1.3
Toluene			108-88-3	1000	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(1.2) U	(0.3) U	(1.2) U	(0.8) U	(1.2) U	(0.8) U	(1.2) U	(0.3) U
Total Xylenes			1330-20-7	1000	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.9) U	(0.4) U	(0.9) U	(0.9) U	(0.9) U	(0.9) U	(0.4) U	(0.4) U
Trans-1,2-Dichloroethene			156-60-5	100	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(1.2) U	(0.5) U	(1.2) U	(1.2) U	(1.2) U	(1.2) U	(1.2) U	(0.5) U
Trans-1,3-Dichloropropene			10061-02-6	NA	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(1.4) U	(0.4) U	(1.4) U	(1) U	(1.4) U	(1) U	(1.4) U	(0.4) U
Trichloroethylene			79-01-6	1	62	48	64	53	(0.6) U	4	(0.6) U	4.4	(0.6) U	6.2	(0.6) U	0.7
Trichlorofluoromethane			75-69-4	2000	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(2) U	(0.8) U	(2) U	(2) U	(2) U	(2) U	(0.8) U	(0.8) U
Vinyl Chloride			75-01-4	5	(0.3) U	(0.5) U	(0.3) U	(0.5) U	84	56	94	70	110	78	350	300
Total VOCs			---	---	69.1	53.3	71.3	58.7	374	312	514	396.3	500	385.8	490	361
Total TIC			---	100/500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12.1

NOTES:

All results are reported in micrograms per liter (µg/L).
Depths are reported in feet (ft) below top of well casing.
Sample IDs ending in "P" indicate that it is a duplicate sample.
CAS_RN = Chemical Abstracts Service Registry Number
NJDEP GWQS = New Jersey Department of Environmental
Protection Groundwater Quality Standards
TICs = Tentatively Identified Compounds
U - Indicates that the analyte was not detected at the Method
Detection Limit (MDL) shown in parenthesis.
ND = Not Detected
Bold indicates that the concentration exceeds the NJDEP GWQS

TABLE 4
SUMMARY OF PASSIVE DIFFUSION BAG ANALYTICAL RESULTS
Former Ingersoll Rand Facility
Phillipsburg, New Jersey

Field ID			RW11A		RW11B		RW13A		RW13B		RW14A		RW14B		RW15A	
Lab ID			383803	423972	383804	423973	383806	423951	383807	423952	383789	423956	383790	423957	383795	423967
Depth			115	115	170	170	115	115	165	165	118	118	155	165	113	113
Sample Date			10/16/02	04/23/03	10/16/02	04/23/03	10/16/02	04/23/03	10/16/02	04/23/03	10/15/02	04/23/03	10/15/02	04/23/03	10/15/02	04/23/03
Sample Time			7:35	15:45	7:40	15:50	8:10	10:50	8:15	10:55	11:10	11:30	11:15	11:35	13:55	14:10
Volatile Organic Compounds (VOCs) (via EPA Method 624)																
	CAS_RN	GWQS														
1,1,1-Trichloroethane	71-55-6	30	0.7	(0.2) U	(0.3) U	0.3	0.4	0.5	0.4	0.4	7	2	6.7	2.8	2.6	1.8
1,1,2,2-Tetrachloroethane	79-34-5	1	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U
1,1,2-Trichloroethane	79-00-5	3	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U
1,1-Dichloroethane	75-34-3	50	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	12	6.7	12	4.9	3.5	0.9
1,1-Dichloroethene	75-35-4	2	(0.3) U	(0.4) U	0.7	(0.4) U	(0.3) U	(0.4) U	(0.3) U	(0.4) U	3	0.9	2.6	0.9	(0.3) U	(0.4) U
1,2-Dichloroethane	107-06-2	2	(0.4) U	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(0.3) U
1,2-Dichloropropane	78-87-5	1	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U
2-Chloroethyl Vinyl Ether	110-75-8	100	(0.5) U	(0.4) U	(0.5) U	(0.4) U	(0.5) U	(0.4) U	(0.5) U	(0.4) U	(0.5) U	(0.4) U	(0.5) U	(0.4) U	(0.5) U	(0.4) U
Benzene	71-43-2	1	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U
Bromodichloromethane	75-27-4	1	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U
Bromoform	75-25-2	4	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U
Bromomethane	74-83-9	10	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(0.3) U	(0.4) U
Carbon tetrachloride	56-23-5	2	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U
Chlorobenzene	108-90-7	50	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U
Chloroethane	75-00-3	100	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U
Chloroform	67-66-3	6	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	0.4	(0.2) U	0.4	(0.2) U	(0.2) U	(0.2) U
Chloromethane	74-87-3	30	(0.4) U	(0.5) U	(0.4) U	(0.5) U	(0.4) U	(0.5) U	(0.4) U	(0.5) U	(0.4) U	(0.5) U	(0.4) U	(0.5) U	(0.4) U	(0.5) U
cis-1,2-Dichloroethene	156-59-2	70	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	3.8	2.2	4.2	2.1	58	12
cis-1,3-Dichloropropene	10061-01-5	NA	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U
Dibromochloromethane	124-48-1	10	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U
Ethylbenzene	100-41-4	700	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U
Methylene Chloride	75-09-2	3	(0.9) U	(0.8) U	(0.9) U	(0.8) U	(0.9) U	(0.8) U	(0.9) U	(0.8) U	(0.9) U	(0.8) U	(0.9) U	(0.8) U	(0.9) U	(0.8) U
Tetrachloroethene	127-18-4	1	1.9	1.2	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	0.4	(0.3) U	0.3	(0.3) U	2.5	7.9
Toluene	108-88-3	1000	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U
Total Xylenes	1330-20-7	1000	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U
Trans-1,2-Dichloroethene	156-60-5	100	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U
Trans-1,3-Dichloropropene	10061-02-6	NA	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U
Trichloroethylene	79-01-6	1	(0.1) U	(0.2) U	(0.1) U	(0.2) U	(0.1) U	(0.2) U	(0.1) U	(0.2) U	2.1	0.8	2	0.8	12	5.7
Trichlorofluoromethane	75-69-4	2000	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U
Vinyl Chloride	75-01-4	5	(0.3) U	(0.5) U	(0.3) U	(0.5) U	(0.3) U	(0.5) U	(0.3) U	(0.5) U	(0.3) U	(0.5) U	(0.3) U	(0.5) U	(0.3) U	(0.5) U
Total VOCs	---	---	2.6	1.2	0.7	0.3	0.4	0.5	0.4	0.4	28.7	12.6	28.2	11.5	78.6	28.3
Total TIC	---	100/500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

NOTES:

All results are reported in micrograms per liter (µg/L).
Depths are reported in feet (ft) below top of well casing.
Sample IDs ending in "P" indicate that it is a duplicate sample.
CAS_RN = Chemical Abstracts Service Registry Number
NJDEP GWQS = New Jersey Department of Environmental
Protection Groundwater Quality Standards
TICs = Tentatively Identified Compounds
U - Indicates that the analyte was not detected at the Method
Detection Limit (MDL) shown in parenthesis.
ND = Not Detected
Bold indicates that the concentration exceeds the NJDEP GWQS

TABLE 4
SUMMARY OF PASSIVE DIFFUSION BAG ANALYTICAL RESULTS
Former Ingersoll Rand Facility
Phillipsburg, New Jersey

Field ID	RW15B		RW15C		RW16A		RW16B		TH36A		TH36P		THWLSA	THWLSB		
Lab ID	383796	423968	383797	423969	383793	423970	383794	423971	383805	423974	383811	423975	423965	423966		
Depth	135	135	156	156	120	121	141.5	141.5	110	110	110	110	110	123		
Sample Date	10/15/02	04/23/03	10/15/02	04/23/03	10/15/02	04/23/03	10/15/02	04/23/03	10/16/02	04/23/03	10/16/02	04/23/03	04/23/03	04/23/03		
Sample Time	14:00	14:15	14:05	14:20	13:15	14:35	13:20	14:40	8:50	16:20	8:55	16:25	13:50	13:55		
Volitale Organic Compounds (VOCs) (via EPA Method 624)																
CAS_RN	GWQS															
1,1,1-Trichloroethane	71-55-6	30	1.3	1.8	1.4	1.8	310	66	400	51	1.6	2.4	1.7	2.4	86	58
1,1,2,2-Tetrachloroethane	79-34-5	1	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(3.1) U	(5.6) U	(3.1) U	(7) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.6) U	(1.4) U
1,1,2-Trichloroethane	79-00-5	3	(0.3) U	(0.3) U	(0.3) U	(0.3) U	8.1	(6.8) U	7.8	(8.5) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.7) U	(1.7) U
1,1-Dichloroethane	75-34-3	50	3.6	(0.2) U	3.5	1	600	310	620	140	1.9	5.4	2.2	6	260	250
1,1-Dichloroethene	75-35-4	2	(0.3) U	(0.4) U	(0.3) U	(0.4) U	33	70	40	55	0.4	(0.4) U	0.4	(0.4) U	12	16
1,2-Dichloroethane	107-06-2	2	(0.4) U	(0.3) U	(0.4) U	(0.3) U	25	48	25	44	(0.4) U	(0.3) U	(0.4) U	(0.3) U	1.4	(1.3) U
1,2-Dichloropropane	78-87-5	1	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(3.5) U	(4.6) U	3.5	(5.8) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.5) U	(1.2) U
2-Chloroethyl Vinyl Ether	110-75-8	100	(0.5) U	(0.4) U	(0.5) U	(0.4) U	(4.7) U	(8.8) U	4.7	(11) U	(0.5) U	(0.4) U	(0.5) U	(0.4) U	(0.9) U	(2.2) U
Benzene	71-43-2	1	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(2.9) U	(5.2) U	(2.9) U	(6.5) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.5) U	(1.3) U
Bromodichloromethane	75-27-4	1	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(2) U	(7.2) U	(2) U	(9) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.7) U	(1.8) U
Bromoform	75-25-2	4	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(2.9) U	(6.8) U	(2.9) U	(8.5) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.7) U	(1.7) U
Bromomethane	74-83-9	10	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(3.2) U	(8.8) U	(3.2) U	(11) U	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(0.9) U	(2.2) U
Carbon tetrachloride	56-23-5	2	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(3) U	(3.8) U	(3) U	(4.8) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.4) U	(1) U
Chlorobenzene	108-90-7	50	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(2.1) U	(3.6) U	(2.1) U	(4.5) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.4) U	(0.9) U
Chloroethane	75-00-3	100	(0.5) U	(0.5) U	(0.5) U	(0.5) U	970	2600	950	2600	(0.5) U	(0.5) U	(0.5) U	(0.5) U	81	100
Chloroform	67-66-3	6	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(2.5) U	(3.8) U	(2.5) U	(4.8) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.4) U	(1) U
Chloromethane	74-87-3	30	(0.4) U	(0.5) U	(0.4) U	(0.5) U	(4.3) U	(9.2) U	(4.3) U	(12) U	(0.4) U	(0.5) U	(0.4) U	(0.5) U	(0.9) U	(2.3) U
cis-1,2-Dichloroethene	156-59-2	70	12	13	15	12	16	36	16	27	1.2	0.9	1.1	1	4.6	5.8
cis-1,3-Dichloropropene	10061-01-5	NA	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(3) U	(4.8) U	(3) U	(6) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.5) U	(1.2) U
Dibromochloromethane	124-48-1	10	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(2.7) U	(5) U	(2.7) U	(6.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.5) U	(1.2) U
Ethylbenzene	100-41-4	700	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(1.5) U	(7.4) U	(1.5) U	(9.2) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.7) U	(1.8) U
Methylene Chloride	75-09-2	3	(0.9) U	(0.8) U	(0.9) U	(0.8) U	(8.8) U	(16) U	(8.8) U	(20) U	(0.9) U	(0.8) U	(0.9) U	(0.8) U	(1.6) U	(4) U
Tetrachloroethene	127-18-4	1	2.7	6.5	2.3	5.3	(2.4) U	(6.2) U	(2.4) U	(7.8) U	0.6	0.4	0.7	0.6	(0.6) U	(1.6) U
Toluene	108-88-3	1000	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(2.4) U	(3) U	(2.4) U	(3.8) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.3) U	(0.8) U
Total Xylenes	1330-20-7	1000	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(1.8) U	(3.6) U	(1.8) U	(4.5) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.4) U	(0.9) U
Trans-1,2-Dichloroethene	156-60-5	100	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(2.3) U	(5) U	(2.3) U	(6.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.5) U	(1.2) U
Trans-1,3-Dichloropropene	10061-02-6	NA	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(2.8) U	(4.2) U	(2.8) U	(5.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.4) U	(1) U
Trichloroethylene	79-01-6	1	5.6	5.4	5.8	4.9	(1.2) U	(3.6) U	(1.2) U	(4.5) U	0.5	0.4	0.5	0.4	2.7	2.7
Trichlorofluoromethane	75-69-4	2000	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(4.1) U	(8) U	(4.1) U	(10) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.8) U	(2) U
Vinyl Chloride	75-01-4	5	4.7	(0.5) U	2.8	(0.5) U	(2.9) U	(11) U	(2.9) U	49	(0.3) U	(0.5) U	(0.3) U	(0.5) U	4.7	16
Total VOCs	---	---	29.9	26.7	30.8	25	1962.1	3130	2067	2966	6.2	9.5	6.6	10.4	452.4	448.5
Total TIC	---	100/500	ND	ND	ND	ND	ND	ND	40	ND	ND	ND	ND	ND	ND	ND

NOTES:

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Depths are reported in feet (ft) below top of well casing.
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CAS_RN = Chemical Abstracts Service Registry Number
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TICs = Tentatively Identified Compounds
U - Indicates that the analyte was not detected at the Method
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ND = Not Detected
Bold indicates that the concentration exceeds the NJDEP GWQS

TABLE 4
SUMMARY OF PASSIVE DIFFUSION BAG ANALYTICAL RESULTS
Former Ingersoll Rand Facility
Phillipsburg, New Jersey

Field ID			MW16A		MW16B		MW16C		MW32A		MW32B		MW32P	MW33AA			
Lab ID			383808	423953	383809	423954	383810	423955	383787	423958	383788	423959	423978	383780	423949		
Depth			130	130	155	155	190	190	118	118	129	129	129	107	107		
Sample Date			10/16/02	04/23/03	10/16/02	04/23/03	10/16/02	04/23/03	10/15/02	04/23/03	10/15/02	04/23/03	04/23/03	10/15/02	04/23/03		
Sample Time			8:25	11:05	8:30	11:10	8:35	11:15	11:00	11:45	11:05	11:50	11:55	9:50	10:30		
Volitale Organic Compounds (VOCs) (via EPA Method 624)																	
CAS_RN GWQS																	
1,1,1-Trichloroethane			71-55-6	30	7.8	6.9	5.8	2.8	4	4.8	7.6	3.1	8	3.5	3.2	7.5	4.9
1,1,2,2-Tetrachloroethane			79-34-5	1	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U
1,1,2-Trichloroethane			79-00-5	3	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U
1,1-Dichloroethane			75-34-3	50	6.1	6.6	2.5	3.1	(0.3) U	1.4	12	5.4	13	5.5	5.3	2	(0.2) U
1,1-Dichloroethene			75-35-4	2	3.6	4	2.5	2.2	1.7	1.5	2.5	1.1	2.9	1.2	1.1	5.1	2.9
1,2-Dichloroethane			107-06-2	2	(0.4) U	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(0.3) U	(0.3) U	(0.4) U	(0.3) U
1,2-Dichloropropane			78-87-5	1	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.2) U	(0.4) U	(0.2) U
2-Chloroethyl Vinyl Ether			110-75-8	100	(0.5) U	(0.4) U	(0.5) U	(0.4) U	(0.5) U	(0.4) U	(0.5) U	(0.4) U	(0.5) U	(0.4) U	(0.4) U	(0.5) U	(0.4) U
Benzene			71-43-2	1	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U
Bromodichloromethane			75-27-4	1	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U
Bromoform			75-25-2	4	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U
Bromomethane			74-83-9	10	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(0.3) U
Carbon tetrachloride			56-23-5	2	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.2) U	(0.3) U	(0.2) U
Chlorobenzene			108-90-7	50	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U
Chloroethane			75-00-3	100	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U
Chloroform			67-66-3	6	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	0.4	(0.2) U	0.4	(0.2) U	0.2	(0.2) U	(0.2) U	(0.2) U
Chloromethane			74-87-3	30	(0.4) U	(0.5) U	(0.4) U	(0.5) U	(0.4) U	(0.5) U	(0.4) U	(0.5) U	(0.4) U	(0.5) U	(0.4) U	(0.5) U	(0.4) U
cis-1,2-Dichloroethene			156-59-2	70	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	3.7	2	4.5	2.4	2	(0.3) U	(0.2) U
cis-1,3-Dichloropropene			10061-01-5	NA	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.2) U	(0.3) U	(0.2) U
Dibromochloromethane			124-48-1	10	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.2) U	(0.3) U	(0.2) U
Ethylbenzene			100-41-4	700	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U
Methylene Chloride			75-09-2	3	(0.9) U	(0.8) U	(0.9) U	2.7	(0.9) U	(0.8) U	(0.9) U	(0.8) U	(0.9) U	(0.8) U	(0.8) U	(0.9) U	(0.8) U
Tetrachloroethene			127-18-4	1	2.4	1	0.7	(0.3) U	0.5	0.5	0.6	0.5	0.7	0.3	0.5	4.1	3.7
Toluene			108-88-3	1000	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U
Total Xylenes			1330-20-7	1000	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U
Trans-1,2-Dichloroethene			156-60-5	100	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U
Trans-1,3-Dichloropropene			10061-02-6	NA	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.2) U	(0.3) U	(0.2) U
Trichloroethylene			79-01-6	1	0.7	(0.2) U	0.4	(0.2) U	(0.1) U	(0.2) U	2.1	1	2	1.2	0.9	9.4	8
Trichlorofluoromethane			75-69-4	2000	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U
Vinyl Chloride			75-01-4	5	(0.3) U	(0.5) U	(0.3) U	(0.5) U	(0.3) U	(0.5) U	(0.3) U	(0.5) U	(0.3) U	(0.5) U	(0.3) U	(0.5) U	(0.3) U
Total VOCs			---	---	20.6	18.5	11.9	10.8	6.2	8.2	28.9	13.1	31.5	14.1	13.2	28.1	19.5
Total TIC			---	100/500	ND	ND	ND	5.7	ND	ND	ND	ND	ND	ND	ND	ND	ND

NOTES:

All results are reported in micrograms per liter (µg/L).
Depths are reported in feet (ft) below top of well casing.
Sample IDs ending in "P" indicate that it is a duplicate sample.
CAS_RN = Chemical Abstracts Service Registry Number
NJDEP GWQS = New Jersey Department of Environmental
Protection Groundwater Quality Standards
TICs = Tentatively Identified Compounds
U - Indicates that the analyte was not detected at the Method
Detection Limit (MDL) shown in parenthesis.
ND = Not Detected
Bold indicates that the concentration exceeds the NJDEP GWQS

TABLE 4
SUMMARY OF PASSIVE DIFFUSION BAG ANALYTICAL RESULTS
Former Ingersoll Rand Facility
Phillipsburg, New Jersey

Field ID	MW33AB		MW34A		MW34B		MW34C		MW35A		MW35B		MW37A			
Lab ID	383781	423950	383777	423946	383778	423947	383779	423948	383775	423944	383776	423945	383769	423941		
Depth	120	120	108	108	113	113	120	120	128	122	137	128	60	60		
Sample Date	10/15/02	04/23/03	10/15/02	04/23/03	10/15/02	04/23/03	10/15/02	04/23/03	10/15/02	04/23/03	10/15/02	04/23/03	10/15/02	04/23/03		
Sample Time	9:55	10:35	9:30	10:10	9:35	10:15	9:40	10:20	9:10	9:55	9:15	10:00	8:10	9:15		
Volatile Organic Compounds (VOCs) (via EPA Method 624)																
CAS_RN	GWQS															
1,1,1-Trichloroethane	71-55-6	30	5.9	3	3.8	2.6	4.4	4.6	5	3.2	140	150	81	88	(0.3) U	(0.2) U
1,1,2,2-Tetrachloroethane	79-34-5	1	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.6) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U
1,1,2-Trichloroethane	79-00-5	3	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.7) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U
1,1-Dichloroethane	75-34-3	50	1.7	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	41	60	22	26	(0.3) U	(0.2) U
1,1-Dichloroethene	75-35-4	2	3.7	1.5	0.9	(0.4) U	1.1	0.6	1	(0.4) U	10	7.4	7.5	5.7	(0.3) U	(0.4) U
1,2-Dichloroethane	107-06-2	2	(0.4) U	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(0.5) U	(0.4) U	(0.3) U	(0.4) U	(0.3) U
1,2-Dichloropropane	78-87-5	1	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.5) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U
2-Chloroethyl Vinyl Ether	110-75-8	100	(0.5) U	(0.4) U	(0.5) U	(0.4) U	(0.5) U	(0.4) U	(0.5) U	(0.4) U	(0.5) U	(0.9) U	(0.5) U	(0.4) U	(0.5) U	(0.4) U
Benzene	71-43-2	1	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.5) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U
Bromodichloromethane	75-27-4	1	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.7) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U
Bromoform	75-25-2	4	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.7) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U
Bromomethane	74-83-9	10	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(0.3) U	(0.9) U	(0.3) U	(0.4) U	(0.3) U	(0.4) U
Carbon tetrachloride	56-23-5	2	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.4) U	(0.3) U	(0.2) U	1.2	1.3
Chlorobenzene	108-90-7	50	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.4) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U
Chloroethane	75-00-3	100	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.9) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U
Chloroform	67-66-3	6	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.4) U	(0.2) U	(0.2) U	0.3	0.3
Chloromethane	74-87-3	30	(0.4) U	(0.5) U	(0.4) U	(0.5) U	(0.4) U	(0.5) U	(0.4) U	(0.5) U	(0.4) U	(0.9) U	(0.4) U	(0.5) U	(0.4) U	(0.5) U
cis-1,2-Dichloroethene	156-59-2	70	(0.3) U	(0.2) U	2.3	0.5	2.4	5.3	5.1	2.2	1.1	(0.5) U	1.2	0.7	(0.3) U	(0.2) U
cis-1,3-Dichloropropene	10061-01-5	NA	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.5) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U
Dibromochloromethane	124-48-1	10	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.5) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U
Ethylbenzene	100-41-4	700	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.7) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U
Methylene Chloride	75-09-2	3	(0.9) U	(0.8) U	(0.9) U	(0.8) U	(0.9) U	(0.8) U	(0.9) U	(0.8) U	(0.9) U	(1.6) U	(0.9) U	(0.8) U	(0.9) U	(0.8) U
Tetrachloroethene	127-18-4	1	3.8	2.1	3.1	0.5	4.1	4.2	5.7	1.6	4.8	3.4	3.1	2.6	(0.2) U	(0.3) U
Toluene	108-88-3	1000	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.3) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U
Total Xylenes	1330-20-7	1000	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.4) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U
Trans-1,2-Dichloroethene	156-60-5	100	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.5) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U
Trans-1,3-Dichloropropene	10061-02-6	NA	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.4) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U
Trichloroethylene	79-01-6	1	7.3	4	4.2	1.8	4.4	7.6	6.5	3.4	14	14	9.9	9.2	17	13
Trichlorofluoromethane	75-69-4	2000	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.8) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U
Vinyl Chloride	75-01-4	5	(0.3) U	(0.5) U	(0.3) U	(0.5) U	(0.3) U	(0.5) U	(0.3) U	(0.5) U	(0.3) U	(1.1) U	(0.3) U	(0.5) U	(0.3) U	(0.5) U
Total VOCs	---	---	22.4	10.6	14.3	5.4	16.4	22.3	23.3	10.4	210.9	234.8	124.7	132.2	18.5	14.6
Total TIC	---	100/500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

NOTES:

All results are reported in micrograms per liter (µg/L).
Depths are reported in feet (ft) below top of well casing.
Sample IDs ending in "P" indicate that it is a duplicate sample.
CAS_RN = Chemical Abstracts Service Registry Number
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U - Indicates that the analyte was not detected at the Method
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ND = Not Detected
Bold indicates that the concentration exceeds the NJDEP GWQS

TABLE 4
SUMMARY OF PASSIVE DIFFUSION BAG ANALYTICAL RESULTS
Former Ingersoll Rand Facility
Phillipsburg, New Jersey

Field ID			MW37B		MW37C		RW09A		RW09B		RW09C		RW09D		RW09E	
Lab ID			383770	423942	383771	423943	383798	423960	383799	423961	383800	423962	383801	423963	383802	423964
Depth			86	86	98	98	90	90	118	118	147	147	170	160	193	188
Sample Date			10/15/02	04/23/03	10/15/02	04/23/03	10/15/02	04/23/03	10/15/02	04/23/03	10/15/02	04/23/03	10/15/02	04/23/03	10/15/02	04/23/03
Sample Time			8:15	9:20	8:20	9:25	14:25	12:10	14:30	12:15	14:35	12:20	14:40	12:25	14:45	12:30
Volatile Organic Compounds (VOCs) (via EPA Method 624)																
CAS_RN GWQS																
1,1,1-Trichloroethane	71-55-6	30	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(1.3) U	(0.3) U	(1.3) U	(0.8) U	(1.3) U	(0.8) U	(1.3) U	(0.3) U	(0.5) U	(0.3) U
1,1,1,2-Tetrachloroethane	79-34-5	1	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(1.6) U	(0.6) U	(1.6) U	(1.4) U	(1.6) U	(1.4) U	(1.6) U	(0.6) U	(0.6) U	(0.6) U
1,1,2-Trichloroethane	79-00-5	3	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(1.4) U	(0.7) U	(1.4) U	(1.7) U	(1.4) U	(1.7) U	(1.4) U	(0.7) U	(0.6) U	(0.7) U
1,1-Dichloroethane	75-34-3	50	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(1.4) U	(0.5) U	(1.4) U	(1.2) U	(1.4) U	(1.2) U	(1.4) U	(0.5) U	(0.5) U	(0.5) U
1,1-Dichloroethene	75-35-4	2	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(1.4) U	(0.9) U	(1.4) U	(2.2) U	(1.4) U	(2.2) U	(1.4) U	(0.9) U	(0.6) U	3.1
1,2-Dichloroethane	107-06-2	2	(0.4) U	(0.3) U	(0.4) U	(0.3) U	(1.8) U	(0.5) U	(1.8) U	(1.3) U	(1.8) U	(1.3) U	(1.8) U	(0.5) U	(0.7) U	(0.5) U
1,2-Dichloropropane	78-87-5	1	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(1.8) U	(0.5) U	(1.8) U	(1.2) U	(1.8) U	(1.2) U	(1.8) U	(0.5) U	(0.7) U	(0.5) U
2-Chloroethyl Vinyl Ether	110-75-8	100	(0.5) U	(0.4) U	(0.5) U	(0.4) U	(2.4) U	(0.9) U	(2.4) U	(2.2) U	(2.4) U	(2.2) U	(2.4) U	(0.9) U	(0.9) U	(0.9) U
Benzene	71-43-2	1	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(1.4) U	(0.5) U	(1.4) U	(1.3) U	(1.4) U	(1.3) U	(1.4) U	(0.5) U	(0.6) U	(0.5) U
Bromodichloromethane	75-27-4	1	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(1) U	(0.7) U	(1) U	(1.8) U	(1) U	(1.8) U	(1) U	(0.7) U	(0.4) U	(0.7) U
Bromoform	75-25-2	4	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(1.4) U	(0.7) U	(1.4) U	(1.7) U	(1.4) U	(1.7) U	(1.4) U	(0.7) U	(0.6) U	(0.7) U
Bromomethane	74-83-9	10	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(1.6) U	(0.9) U	(1.6) U	(2.2) U	(1.6) U	(2.2) U	(1.6) U	(0.9) U	(0.6) U	(0.9) U
Carbon tetrachloride	56-23-5	2	6.2	4.6	6.5	5.1	(1.5) U	(0.4) U	(1.5) U	(1) U	(1.5) U	(1) U	(1.5) U	(0.4) U	(0.6) U	(0.4) U
Chlorobenzene	108-90-7	50	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(1) U	(0.4) U	(1) U	(0.9) U	(1) U	(0.9) U	(1) U	(0.4) U	(0.4) U	(0.4) U
Chloroethane	75-00-3	100	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(2.4) U	(0.9) U	(2.4) U	(2.3) U	(2.4) U	(2.3) U	(2.4) U	(0.9) U	(1) U	(0.9) U
Chloroform	67-66-3	6	0.9	0.7	0.8	0.6	(1.2) U	(0.4) U	(1.2) U	(1) U	(1.2) U	(1) U	(1.2) U	(0.4) U	(0.5) U	(0.4) U
Chloromethane	74-87-3	30	(0.4) U	(0.5) U	(0.4) U	(0.5) U	(2.2) U	(0.9) U	(2.2) U	(2.3) U	(2.2) U	(2.3) U	(2.2) U	(0.9) U	(0.9) U	(0.9) U
cis-1,2-Dichloroethene	156-59-2	70	(0.3) U	(0.2) U	(0.3) U	(0.2) U	290	250	420	320	390	300	140	59	75	320
cis-1,3-Dichloropropene	10061-01-5	NA	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(1.5) U	(0.5) U	(1.5) U	(1.2) U	(1.5) U	(1.2) U	(1.5) U	(0.5) U	(0.6) U	(0.5) U
Dibromochloromethane	124-48-1	10	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(1.4) U	(0.5) U	(1.4) U	(1.2) U	(1.4) U	(1.2) U	(1.4) U	(0.5) U	(0.5) U	(0.5) U
Ethylbenzene	100-41-4	700	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.8) U	(0.7) U	(0.8) U	(1.8) U	(0.8) U	(1.8) U	(0.8) U	(0.7) U	(0.3) U	(0.7) U
Methylene Chloride	75-09-2	3	(0.9) U	(0.8) U	(0.9) U	(0.8) U	(4.4) U	(1.6) U	(4.4) U	(4) U	(4.4) U	(4) U	(4.4) U	(1.6) U	(1.8) U	(1.6) U
Tetrachloroethene	127-18-4	1	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(1.2) U	2	(1.2) U	1.9	(1.2) U	1.6	(1.2) U	1.3	1.4	1.9
Toluene	108-88-3	1000	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(1.2) U	(0.3) U	(1.2) U	(0.8) U	(1.2) U	(0.8) U	(1.2) U	(0.3) U	(0.5) U	(0.3) U
Total Xylenes	1330-20-7	1000	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.9) U	(0.4) U	(0.9) U	(0.9) U	(0.9) U	(0.9) U	(0.9) U	(0.4) U	(0.4) U	(0.4) U
Trans-1,2-Dichloroethene	156-60-5	100	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(1.2) U	(0.5) U	(1.2) U	(1.2) U	(1.2) U	(1.2) U	(1.2) U	(0.5) U	(0.5) U	1
Trans-1,3-Dichloropropene	10061-02-6	NA	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(1.4) U	(0.4) U	(1.4) U	(1) U	(1.4) U	(1) U	(1.4) U	(0.4) U	(0.6) U	(0.4) U
Trichloroethylene	79-01-6	1	62	48	64	53	(0.6) U	4	(0.6) U	4.4	(0.6) U	6.2	(0.6) U	0.7	1.7	2.6
Trichlorofluoromethane	75-69-4	2000	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(2) U	(0.8) U	(2) U	(2) U	(2) U	(2) U	(2) U	(0.8) U	(0.8) U	(0.8) U
Vinyl Chloride	75-01-4	5	(0.3) U	(0.5) U	(0.3) U	(0.5) U	84	56	94	70	110	78	350	300	200	350
Total VOCs	---	---	69.1	53.3	71.3	58.7	374	312	514	396.3	500	385.8	490	361	278.1	678.6
Total TIC	---	100/500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12.1	ND

NOTES:

All results are reported in micrograms per liter (µg/L).
Depths are reported in feet (ft) below top of well casing.
Sample IDs ending in "P" indicate that it is a duplicate sample.
CAS_RN = Chemical Abstracts Service Registry Number
NJDEP GWQS = New Jersey Department of Environmental
Protection Groundwater Quality Standards
TICs = Tentatively Identified Compounds
U - Indicates that the analyte was not detected at the Method
Detection Limit (MDL) shown in parenthesis.
ND = Not Detected
Bold indicates that the concentration exceeds the NJDEP GWQS

TABLE 4
SUMMARY OF PASSIVE DIFFUSION BAG ANALYTICAL RESULTS
Former Ingersoll Rand Facility
Phillipsburg, New Jersey

Field ID	RW11A		RW11B		RW13A		RW13B		RW14A		RW14B		RW15A			
Lab ID	383803	423972	383804	423973	383806	423951	383807	423952	383789	423956	383790	423957	383795	423967		
Depth	115	115	170	170	115	115	165	165	118	118	155	165	113	113		
Sample Date	10/16/02	04/23/03	10/16/02	04/23/03	10/16/02	04/23/03	10/16/02	04/23/03	10/15/02	04/23/03	10/15/02	04/23/03	10/15/02	04/23/03		
Sample Time	7:35	15:45	7:40	15:50	8:10	10:50	8:15	10:55	11:10	11:30	11:15	11:35	13:55	14:10		
Volatile Organic Compounds (VOCs) (via EPA Method 624)																
CAS_RN	GWQS															
1,1,1-Trichloroethane	71-55-6	30	0.7	(0.2) U	(0.3) U	0.3	0.4	0.5	0.4	0.4	7	2	6.7	2.8	2.6	1.8
1,1,2,2-Tetrachloroethane	79-34-5	1	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U
1,1,2-Trichloroethane	79-00-5	3	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U
1,1-Dichloroethane	75-34-3	50	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	12	6.7	12	4.9	3.5	0.9
1,1-Dichloroethene	75-35-4	2	(0.3) U	(0.4) U	0.7	(0.4) U	(0.3) U	(0.4) U	(0.3) U	(0.4) U	3	0.9	2.6	0.9	(0.3) U	(0.4) U
1,2-Dichloroethane	107-06-2	2	(0.4) U	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(0.3) U
1,2-Dichloropropane	78-87-5	1	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U
2-Chloroethyl Vinyl Ether	110-75-8	100	(0.5) U	(0.4) U	(0.5) U	(0.4) U	(0.5) U	(0.4) U	(0.5) U	(0.4) U	(0.5) U	(0.4) U	(0.5) U	(0.4) U	(0.5) U	(0.4) U
Benzene	71-43-2	1	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U
Bromodichloromethane	75-27-4	1	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U
Bromoform	75-25-2	4	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U
Bromomethane	74-83-9	10	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(0.3) U	(0.4) U
Carbon tetrachloride	56-23-5	2	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U
Chlorobenzene	108-90-7	50	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U
Chloroethane	75-00-3	100	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U
Chloroform	67-66-3	6	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	0.4	(0.2) U	0.4	(0.2) U	(0.2) U	(0.2) U
Chloromethane	74-87-3	30	(0.4) U	(0.5) U	(0.4) U	(0.5) U	(0.4) U	(0.5) U	(0.4) U	(0.5) U	(0.4) U	(0.5) U	(0.4) U	(0.5) U	(0.4) U	(0.5) U
cis-1,2-Dichloroethene	156-59-2	70	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	3.8	2.2	4.2	2.1	58	12
cis-1,3-Dichloropropene	10061-01-5	NA	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U
Dibromochloromethane	124-48-1	10	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U
Ethylbenzene	100-41-4	700	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U
Methylene Chloride	75-09-2	3	(0.9) U	(0.8) U	(0.9) U	(0.8) U	(0.9) U	(0.8) U	(0.9) U	(0.8) U	(0.9) U	(0.8) U	(0.9) U	(0.8) U	(0.9) U	(0.8) U
Tetrachloroethene	127-18-4	1	1.9	1.2	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	0.4	(0.3) U	0.3	(0.3) U	2.5	7.9
Toluene	108-88-3	1000	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U
Total Xylenes	1330-20-7	1000	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U
Trans-1,2-Dichloroethene	156-60-5	100	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U
Trans-1,3-Dichloropropene	10061-02-6	NA	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U
Trichloroethylene	79-01-6	1	(0.1) U	(0.2) U	(0.1) U	(0.2) U	(0.1) U	(0.2) U	(0.1) U	(0.2) U	2.1	0.8	2	0.8	12	5.7
Trichlorofluoromethane	75-69-4	2000	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U
Vinyl Chloride	75-01-4	5	(0.3) U	(0.5) U	(0.3) U	(0.5) U	(0.3) U	(0.5) U	(0.3) U	(0.5) U	(0.3) U	(0.5) U	(0.3) U	(0.5) U	(0.3) U	(0.5) U
Total VOCs	---	---	2.6	1.2	0.7	0.3	0.4	0.5	0.4	0.4	28.7	12.6	28.2	11.5	78.6	28.3
Total TIC	---	100/500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

NOTES:

All results are reported in micrograms per liter (µg/L).
Depths are reported in feet (ft) below top of well casing.
Sample IDs ending in "P" indicate that it is a duplicate sample.
CAS_RN = Chemical Abstracts Service Registry Number
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TABLE 4
SUMMARY OF PASSIVE DIFFUSION BAG ANALYTICAL RESULTS
Former Ingersoll Rand Facility
Phillipsburg, New Jersey

Field ID	RW15B		RW15C		RW16A		RW16B		TH36A		TH36P		THWLSA	THWLSB		
Lab ID	383796	423968	383797	423969	383793	423970	383794	423971	383805	423974	383811	423975	423965	423966		
Depth	135	135	156	156	120	121	141.5	141.5	110	110	110	110	110	123		
Sample Date	10/15/02	04/23/03	10/15/02	04/23/03	10/15/02	04/23/03	10/15/02	04/23/03	10/16/02	04/23/03	10/16/02	04/23/03	04/23/03	04/23/03		
Sample Time	14:00	14:15	14:05	14:20	13:15	14:35	13:20	14:40	8:50	16:20	8:55	16:25	13:50	13:55		
Volatile Organic Compounds (VOCs) (via EPA Method 624)																
CAS_RN	GWQS															
1,1,1-Trichloroethane	71-55-6	30	1.3	1.8	1.4	1.8	310	66	400	51	1.6	2.4	1.7	2.4	86	58
1,1,2,2-Tetrachloroethane	79-34-5	1	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(3.1) U	(5.6) U	(3.1) U	(7) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.6) U	(1.4) U
1,1,2-Trichloroethane	79-00-5	3	(0.3) U	(0.3) U	(0.3) U	(0.3) U	8.1	(6.8) U	7.8	(8.5) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.7) U	(1.7) U
1,1-Dichloroethane	75-34-3	50	3.6	(0.2) U	3.5	1	600	310	620	140	1.9	5.4	2.2	6	260	250
1,1-Dichloroethene	75-35-4	2	(0.3) U	(0.4) U	(0.3) U	(0.4) U	33	70	40	55	0.4	(0.4) U	0.4	(0.4) U	12	16
1,2-Dichloroethane	107-06-2	2	(0.4) U	(0.3) U	(0.4) U	(0.3) U	25	48	25	44	(0.4) U	(0.3) U	(0.4) U	(0.3) U	1.4	(1.3) U
1,2-Dichloropropane	78-87-5	1	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(3.5) U	(4.6) U	3.5	(5.8) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.5) U	(1.2) U
2-Chloroethyl Vinyl Ether	110-75-8	100	(0.5) U	(0.4) U	(0.5) U	(0.4) U	(4.7) U	(8.8) U	4.7	(11) U	(0.5) U	(0.4) U	(0.5) U	(0.4) U	(0.9) U	(2.2) U
Benzene	71-43-2	1	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(2.9) U	(5.2) U	(2.9) U	(6.5) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.5) U	(1.3) U
Bromodichloromethane	75-27-4	1	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(2) U	(7.2) U	(2) U	(9) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.7) U	(1.8) U
Bromoform	75-25-2	4	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(2.9) U	(6.8) U	(2.9) U	(8.5) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.7) U	(1.7) U
Bromomethane	74-83-9	10	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(3.2) U	(8.8) U	(3.2) U	(11) U	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(0.9) U	(2.2) U
Carbon tetrachloride	56-23-5	2	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(3) U	(3.8) U	(3) U	(4.8) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.4) U	(1) U
Chlorobenzene	108-90-7	50	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(2.1) U	(3.6) U	(2.1) U	(4.5) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.4) U	(0.9) U
Chloroethane	75-00-3	100	(0.5) U	(0.5) U	(0.5) U	(0.5) U	970	2600	950	2600	(0.5) U	(0.5) U	(0.5) U	(0.5) U	81	100
Chloroform	67-66-3	6	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(2.5) U	(3.8) U	(2.5) U	(4.8) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.4) U	(1) U
Chloromethane	74-87-3	30	(0.4) U	(0.5) U	(0.4) U	(0.5) U	(4.3) U	(9.2) U	(4.3) U	(12) U	(0.4) U	(0.5) U	(0.4) U	(0.5) U	(0.9) U	(2.3) U
cis-1,2-Dichloroethene	156-59-2	70	12	13	15	12	16	36	16	27	1.2	0.9	1.1	1	4.6	5.8
cis-1,3-Dichloropropene	10061-01-5	NA	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(3) U	(4.8) U	(3) U	(6) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.5) U	(1.2) U
Dibromochloromethane	124-48-1	10	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(2.7) U	(5) U	(2.7) U	(6.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.5) U	(1.2) U
Ethylbenzene	100-41-4	700	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(1.5) U	(7.4) U	(1.5) U	(9.2) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.7) U	(1.8) U
Methylene Chloride	75-09-2	3	(0.9) U	(0.8) U	(0.9) U	(0.8) U	(8.8) U	(16) U	(8.8) U	(20) U	(0.9) U	(0.8) U	(0.9) U	(0.8) U	(1.6) U	(4) U
Tetrachloroethene	127-18-4	1	2.7	6.5	2.3	5.3	(2.4) U	(6.2) U	(2.4) U	(7.8) U	0.6	0.4	0.7	0.6	(0.6) U	(1.6) U
Toluene	108-88-3	1000	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(2.4) U	(3) U	(2.4) U	(3.8) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.3) U	(0.8) U
Total Xylenes	1330-20-7	1000	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(1.8) U	(3.6) U	(1.8) U	(4.5) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.4) U	(0.9) U
Trans-1,2-Dichloroethene	156-60-5	100	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(2.3) U	(5) U	(2.3) U	(6.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.5) U	(1.2) U
Trans-1,3-Dichloropropene	10061-02-6	NA	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(2.8) U	(4.2) U	(2.8) U	(5.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.4) U	(1) U
Trichloroethylene	79-01-6	1	5.6	5.4	5.8	4.9	(1.2) U	(3.6) U	(1.2) U	(4.5) U	0.5	0.4	0.5	0.4	2.7	2.7
Trichlorofluoromethane	75-69-4	2000	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(4.1) U	(8) U	(4.1) U	(10) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.8) U	(2) U
Vinyl Chloride	75-01-4	5	4.7	(0.5) U	2.8	(0.5) U	(2.9) U	(11) U	(2.9) U	49	(0.3) U	(0.5) U	(0.3) U	(0.5) U	4.7	16
Total VOCs	---	---	29.9	26.7	30.8	25	1962.1	3130	2067	2966	6.2	9.5	6.6	10.4	452.4	448.5
Total TIC	---	100/500	ND	ND	ND	ND	ND	ND	40	ND	ND	ND	ND	ND	ND	ND

NOTES:

All results are reported in micrograms per liter (µg/L).
Depths are reported in feet (ft) below top of well casing.
Sample IDs ending in "P" indicate that it is a duplicate sample.
CAS_RN = Chemical Abstracts Service Registry Number
NJDEP GWQS = New Jersey Department of Environmental
Protection Groundwater Quality Standards
TICs = Tentatively Identified Compounds
U - Indicates that the analyte was not detected at the Method
Detection Limit (MDL) shown in parenthesis.
ND = Not Detected
Bold indicates that the concentration exceeds the NJDEP GWQS

TABLE 5
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS: VOCs
Former Ingersoll Rand Facility
Phillipsburg, New Jersey

Field ID			MW01	MW02A	MW03	MW06	MW08	MW10	MW12	MW13	MW15
Lab ID			425481	424612	385634	424934	386959	387209	426050	385631	426047
Depth			101.8	95.9	91	96.6	92.8	94	102.2	107.5	98.2
Sample Date			04/29/03	04/29/03	10/23/02	04/25/03	10/29/02	10/30/02	05/02/03	10/22/02	05/01/03
Sample Time			15:30	10:15	12:50	11:40	14:45	13:35	13:30	13:25	16:20
Sample Method			Conv	Conv	Conv	Conv	Low Flow	Low Flow	Conv	Conv	Conv
Volatile Organic Compounds (VOCs) (via Method 624)											
	CAS_RN	GWQS									
1,1,1-Trichloroethane	71-55-6	30	(0.2) U	19	(0.3) U	140	(0.3) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U
1,1,2,2-Tetrachloroethane	79-34-5	1	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U
1,1,2-Trichloroethane	79-00-5	3	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U
1,1-Dichloroethane	75-34-3	50	(0.2) U	(0.2) U	(0.3) U	49	(0.3) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U
1,1-Dichloroethene	75-35-4	2	(0.4) U	2.1	(0.3) U	7.4	(0.3) U	(0.3) U	(0.4) U	(0.3) U	(0.4) U
1,2-Dichloroethane	107-06-2	2	(0.3) U	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(0.4) U	(0.3) U	(0.4) U	(0.3) U
1,2-Dichloropropane	78-87-5	1	(0.2) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U
2-Chloroethyl Vinyl Ether	110-75-8	100	(0.4) U	(0.4) U	(0.5) U	(0.4) U	(0.5) U	(0.5) U	(0.4) U	(0.5) U	(0.4) U
Benzene	71-43-2	1	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U
Bromodichloromethane	75-27-4	1	(0.4) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U
Bromoform	75-25-2	4	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U
Bromomethane	74-83-9	10	(0.4) U	(0.4) U	(0.3) U	(0.4) U	(0.3) U	(0.3) U	(0.4) U	(0.3) U	(0.4) U
Carbon tetrachloride	56-23-5	2	(0.2) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U
Chlorobenzene	108-90-7	50	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U
Chloroethane	75-00-3	100	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U
Chloroform	67-66-3	6	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U
Chloromethane	74-87-3	30	(0.5) U	(0.5) U	(0.4) U	(0.5) U	(0.4) U	(0.4) U	(0.5) U	(0.4) U	(0.5) U
cis-1,2-Dichloroethene	156-59-2	70	(0.2) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U
cis-1,3-Dichloropropene	10061-01-5	NA	(0.2) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U
Dibromochloromethane	124-48-1	10	(0.2) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U
Ethylbenzene	100-41-4	700	(0.4) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U
Methylene Chloride	75-09-2	3	(0.8) U	(0.8) U	(0.9) U	(0.8) U	(0.9) U	(0.9) U	(0.8) U	(0.9) U	(0.8) U
Tetrachloroethene	127-18-4	1	(0.3) U	0.8	(0.2) U	3	(0.2) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U
Toluene	108-88-3	1000	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U
Total Xylenes	1330-20-7	1000	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U
Trans-1,2-Dichloroethene	156-60-5	100	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U
Trans-1,3-Dichloropropene	10061-02-6	NA	(0.2) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U
Trichloroethylene	79-01-6	1	(0.2) U	0.6	(0.1) U	12	(0.1) U	(0.1) U	(0.2) U	(0.1) U	(0.2) U
Trichlorofluoromethane	75-69-4	2000	(0.4) U	0.7	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U
Vinyl Chloride	75-01-4	5	(0.5) U	(0.5) U	(0.3) U	(0.5) U	(0.3) U	(0.3) U	(0.5) U	(0.3) U	(0.5) U
Total VOCs	---	---	ND	23.2	ND	211.4	ND	ND	ND	ND	ND
Total TIC	---	100/500	ND	ND	ND	ND	3.6	ND	83	ND	ND

NOTES:

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Depths are reported in feet (ft) below top of well casing.

Sample IDs ending in "P" indicate that it is a duplicate sample.

CAS_RN = Chemical Abstracts Service Registry Number

NJDEP GWQS = New Jersey Department of Environmental

Protection Groundwater Quality Standards

TICs = Tentatively Identified Compounds

U - Indicates that the analyte was not detected at the Method

Detection Limit (MDL) shown in parenthesis

ND = Not Detected

Bold indicates that the concentration exceeds the NJDEP GWQS.

Conv = Conventional sampling method

TABLE 5
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS: VOCs
Former Ingersoll Rand Facility
Phillipsburg, New Jersey

Field ID	MW18		MW19		MW20		MW24	MW25	MW26	MW27	
Lab ID	384921	425483	385630	426049	384920	425484	426044	386957	426124	386606	426046
Depth	95.6	85.8	104.3	95.7	104.3	33.3	163.2	77.3	65.5	98.2	89.1
Sample Date	10/21/02	04/30/03	10/22/02	05/02/03	10/21/02	04/30/03	05/01/03	10/29/02	05/05/03	10/28/02	05/01/03
Sample Time	14:15	10:15	10:10	11:10	12:55	13:55	11:20	9:40	11:45	12:10	12:50
Sample Method	Conv	Conv	Conv	Conv	Conv	Conv	Conv	Low Flow	Conv	Low Flow	Conv
Volatile Organic Compounds (VOCs) (via Method 624)											
	CAS_RN	GWQS									
1,1,1-Trichloroethane	71-55-6	30	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.2) U	(0.3) U	(0.2) U
1,1,2,2-Tetrachloroethane	79-34-5	1	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U
1,1,2-Trichloroethane	79-00-5	3	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U
1,1-Dichloroethane	75-34-3	50	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.2) U	(0.3) U	(0.2) U
1,1-Dichloroethene	75-35-4	2	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(0.4) U	(0.3) U	(0.4) U
1,2-Dichloroethane	107-06-2	2	(0.4) U	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(0.3) U	(0.4) U
1,2-Dichloropropane	78-87-5	1	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U
2-Chloroethyl Vinyl Ether	110-75-8	100	(0.5) U	(0.4) U	(0.5) U	(0.4) U	(0.5) U	(0.4) U	(0.5) U	(0.4) U	(0.5) U
Benzene	71-43-2	1	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U
Bromodichloromethane	75-27-4	1	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.4) U	(0.2) U	(0.4) U
Bromoform	75-25-2	4	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U
Bromomethane	74-83-9	10	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(0.3) U	(0.4) U	(0.4) U	(0.3) U	(0.4) U
Carbon tetrachloride	56-23-5	2	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.2) U	(0.3) U	(0.2) U
Chlorobenzene	108-90-7	50	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U
Chloroethane	75-00-3	100	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U
Chloroform	67-66-3	6	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U
Chloromethane	74-87-3	30	(0.4) U	(0.5) U	(0.4) U	(0.5) U	(0.4) U	(0.5) U	(0.5) U	(0.4) U	(0.5) U
cis-1,2-Dichloroethene	156-59-2	70	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.2) U	(0.3) U	(0.2) U
cis-1,3-Dichloropropene	10061-01-5	NA	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.2) U	(0.3) U	(0.2) U
Dibromochloromethane	124-48-1	10	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.2) U	(0.3) U	(0.2) U
Ethylbenzene	100-41-4	700	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.2) U	(0.4) U	(0.4) U	(0.2) U	(0.4) U
Methylene Chloride	75-09-2	3	(0.9) U	(0.8) U	(0.9) U	(0.8) U	(0.9) U	(0.8) U	(0.9) U	(0.8) U	(0.9) U
Tetrachloroethene	127-18-4	1	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.3) U	(0.2) U	(0.3) U
Toluene	108-88-3	1000	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U
Total Xylenes	1330-20-7	1000	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U
Trans-1,2-Dichloroethene	156-60-5	100	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U
Trans-1,3-Dichloropropene	10061-02-6	NA	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.3) U	(0.2) U	(0.2) U	(0.3) U	(0.2) U
Trichloroethylene	79-01-6	1	(0.1) U	(0.2) U	0.3	(0.2) U	(0.1) U	(0.2) U	(0.2) U	(0.1) U	(0.2) U
Trichlorofluoromethane	75-69-4	2000	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U
Vinyl Chloride	75-01-4	5	(0.3) U	(0.5) U	(0.3) U	(0.5) U	(0.3) U	(0.5) U	(0.5) U	(0.3) U	(0.5) U
Total VOCs	---	---	ND	ND	0.3	ND	ND	ND	ND	ND	ND
Total TIC	---	100/500	26.3	ND	ND	ND	ND	ND	ND	40.5	62.8

NOTES:

All results are reported in micrograms per liter (mg/L).
Depths are reported in feet (ft) below top of well casing.
Sample IDs ending in "P" indicate that it is a duplicate sample.
CAS_RN = Chemical Abstracts Service Registry Number
NJDEP GWQS = New Jersey Department of Environmental
Protection Groundwater Quality Standards
TICs = Tentatively Identified Compounds
U - Indicates that the analyte was not detected at the Method
Detection Limit (MDL) shown in parenthesis
ND = Not Detected
Bold indicates that the concentration exceeds the NJDEP GW
Conv = Conventional sampling method

TABLE 5
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS: VOCs
Former Ingersoll Rand Facility
Phillipsburg, New Jersey

Field ID		MW30	MW30P	MW36	MW39	MW39P	RW03	RW10		RW15	THby4	THWLS
Lab ID		425479	425480	385635	386199	386204	386958	386200	424935	387208	387210	386607
Depth		56.6	56.6	104.2	93.5	93.5	92	104.2	86.4	102.4	110.5	110.2
Sample Date		04/29/03	04/29/03	10/23/02	10/24/02	10/24/02	10/29/02	10/24/02	04/28/03	10/30/02	10/30/02	10/28/02
Sample Time		12:10	12:15	14:45	12:00	12:05	12:05	15:30	14:40	8:40	11:00	10:35
Sample Method		Conv	Conv	Conv	Conv	Conv	Low Flow	Conv	Conv	Low Flow	Low Flow	Low Flow
Volatile Organic Compounds (VOCs) (via Method 624)												
	CAS_RN GWQS											
1,1,1-Trichloroethane	71-55-6 30	(0.2) U	(0.2) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	3.1	4.6	2.1	(0.3) U	5.5
1,1,2,2-Tetrachloroethane	79-34-5 1	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.6) U
1,1,2-Trichloroethane	79-00-5 3	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.6) U
1,1-Dichloroethane	75-34-3 50	(0.2) U	(0.2) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	1.2	(0.3) U	140
1,1-Dichloroethene	75-35-4 2	(0.4) U	(0.4) U	(0.3) U	(0.3) U	(0.3) U	0.3	0.7	1.2	0.4	(0.3) U	4.4
1,2-Dichloroethane	107-06-2 2	(0.3) U	(0.3) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.3) U	(0.4) U	(0.4) U	(0.7) U
1,2-Dichloropropane	78-87-5 1	(0.2) U	(0.2) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.2) U	(0.4) U	(0.4) U	(0.7) U
2-Chloroethyl Vinyl Ether	110-75-8 100	(0.4) U	(0.4) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.4) U	(0.5) U	(0.5) U	(0.9) U
Benzene	71-43-2 1	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.6) U
Bromodichloromethane	75-27-4 1	(0.4) U	(0.4) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.4) U	(0.2) U	(0.2) U	(0.4) U
Bromoform	75-25-2 4	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.6) U
Bromomethane	74-83-9 10	(0.4) U	(0.4) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.4) U	(0.3) U	(0.3) U	(0.6) U
Carbon tetrachloride	56-23-5 2	(0.2) U	(0.2) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.2) U	(0.3) U	(0.3) U	(0.6) U
Chlorobenzene	108-90-7 50	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.4) U
Chloroethane	75-00-3 100	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	35
Chloroform	67-66-3 6	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.5) U
Chloromethane	74-87-3 30	(0.5) U	(0.5) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.5) U	(0.4) U	(0.4) U	(0.9) U
cis-1,2-Dichloroethene	156-59-2 70	(0.2) U	(0.2) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.2) U	28	(0.3) U	1.5
cis-1,3-Dichloropropene	10061-01-5 NA	(0.2) U	(0.2) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.2) U	(0.3) U	(0.3) U	(0.6) U
Dibromochloromethane	124-48-1 10	(0.2) U	(0.2) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.2) U	(0.3) U	(0.3) U	(0.5) U
Ethylbenzene	100-41-4 700	(0.4) U	(0.4) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.4) U	(0.2) U	(0.2) U	(0.3) U
Methylene Chloride	75-09-2 3	(0.8) U	(0.8) U	(0.9) U	(0.9) U	(0.9) U	(0.9) U	(0.9) U	(0.8) U	(0.9) U	(0.9) U	(1.8) U
Tetrachloroethene	127-18-4 1	(0.3) U	(0.3) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.3) U	4.9	(0.2) U	(0.5) U
Toluene	108-88-3 1000	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.5) U
Total Xylenes	1330-20-7 1000	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.4) U
Trans-1,2-Dichloroethene	156-60-5 100	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.5) U
Trans-1,3-Dichloropropene	10061-02-6 NA	(0.2) U	(0.2) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.2) U	(0.3) U	(0.3) U	(0.6) U
Trichloroethylene	79-01-6 1	(0.2) U	(0.2) U	(0.1) U	(0.1) U	(0.1) U	(0.1) U	(0.1) U	(0.2) U	9	(0.1) U	(0.2) U
Trichlorofluoromethane	75-69-4 2000	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.8) U
Vinyl Chloride	75-01-4 5	(0.5) U	(0.5) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.5) U	(0.3) U	1.1	20
Total VOCs	--- ---	ND	ND	ND	ND	ND	0.3	3.8	5.8	45.6	1.1	206.4
Total TIC	--- 100/500	ND	ND	4.9	ND	ND	ND	ND	ND	6.5	8.4	ND

NOTES:

All results are reported in micrograms per liter (mg/L).
Depths are reported in feet (ft) below top of well casing.
Sample IDs ending in "P" indicate that it is a duplicate sample.
CAS_RN = Chemical Abstracts Service Registry Number
NJDEP GWQS = New Jersey Department of Environmental
Protection Groundwater Quality Standards
TICs = Tentatively Identified Compounds
U - Indicates that the analyte was not detected at the Method
Detection Limit (MDL) shown in parenthesis
ND = Not Detected
Bold indicates that the concentration exceeds the NJDEP GW
Conv = Conventional sampling method

TABLE 6
SUMMARY GROUNDWATER ANALYTICAL RESULTS : VOCs
Former Ingersoll Rand Facility
Phillipsburg, New Jersey

Field ID			MW46	MW47	MW48	MW49	MW50	MW52	MW53	MW53P
Lab ID			445896	445900	445898	445897	445890	445893	445892	445895
Depth			108.5	94.6	94.4	3.7	91.1	97.7	118.9	118.9
Sample Date			7/24/03	7/25/03	7/24/03	7/24/03	7/22/03	7/23/03	7/23/03	7/23/03
Sample Time			9:45	10:40	16:40	12:45	13:35	15:15	10:40	10:45
Total Petroleum Hydrocarbon (TPHC) (via EPA Method 418.1)										
	CAS_RN	GWQS								
Petroleum Hydrocarbons	---	10,000	NA	NA	NA	NA	NA	(1) U	(1) U	(1) U
Volatile Organic Compounds (VOCs) (via Method 624)										
	CAS_RN	GWQS								
1,1,1-Trichloroethane	71-55-6	30	(0.2) U	(0.2) U	(0.2) U	(0.2) U	3	(0.2) U	(0.2) U	(0.2) U
1,1,2,2-Tetrachloroethane	79-34-5	1	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U
1,1,2-Trichloroethane	79-00-5	3	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U
1,1-Dichloroethane	75-34-3	50	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	0.3
1,1-Dichloroethene	75-35-4	1	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U
1,2-Dichloroethane	107-06-2	0.3	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U
1,2-Dichloropropane	78-87-5	0.5	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U
2-Chloroethyl Vinyl Ether	110-75-8	100	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U
Benzene	71-43-2	1	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	0.3	0.3	(0.3) U
Bromodichloromethane	75-27-4	0.3	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U
Bromoform	75-25-2	4	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U
Bromomethane	74-83-9	10	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U
Carbon tetrachloride	56-23-5	0.4	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U
Chlorobenzene	108-90-7	50	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U
Chloroethane	75-00-3	100	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U
Chloroform	67-66-3	6	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U
Chloromethane	74-87-3	30	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U
cis-1,2-Dichloroethene	156-59-2	70	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	0.3	0.5
cis-1,3-Dichloropropene	10061-01-5	NA	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U
Dibromochloromethane	124-48-1	10	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U
Ethylbenzene	100-41-4	700	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U
Methylene Chloride	75-09-2	3	(0.8) U	(0.8) U	(0.8) U	(0.8) U	(0.8) U	(0.8) U	(0.8) U	(0.8) U
Tetrachloroethene	127-18-4	0.4	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U	(0.3) U
Toluene	108-88-3	1000	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U
Total Xylenes	1330-20-7	1000	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U
Trans-1,2-Dichloroethene	156-60-5	100	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U
Trans-1,3-Dichloropropene	10061-02-6	NA	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U	(0.2) U
Trichloroethylene	79-01-6	1	(0.2) U	(0.2) U	(0.2) U	(0.2) U	0.6	(0.2) U	(0.2) U	(0.2) U
Trichlorofluoromethane	75-69-4	2000	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U	(0.4) U
Vinyl Chloride	75-01-4	0.08	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U	(0.5) U
Total VOCs	---	---	ND	ND	ND	ND	3.6	0.3	0.6	0.8
Total TIC	---	100/500	ND	142.2	ND	ND	ND	ND	ND	ND

NOTES:

All results are reported in micrograms per liter (mg/L), except TPHC which is in milligrams per liter (mg/L).

Depths are reported in feet (ft) below top of well casing.

Sample IDs ending in "P" indicate that it is a duplicate sample.

CAS_RN = Chemical Abstracts Service Registry Number

NJDEP GWQS = New Jersey Department of Environmental Protection Groundwater Quality Standards

TICs = Tentatively Identified Compounds

U - Indicates that the analyte was not detected at the Method Detection Limit (MDL) shown in parenthesis.

ND = Not Detected

Bold indicates that the concentration exceeds the NJDEP GWQS.

Conv = Conventional sampling method

TABLE 7
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS: METALS

Former Ingersoll Rand Facility
Phillipsburg, New Jersey

Field ID			MW04	MW30		MW30P	MW36		MW39	
Lab ID			424610	386198	425479	425480	385635	424617	386199	424613
Depth			85.8	60	56.6	56.6	104.2	99	60	76
Sample Date			04/24/03	10/24/02	04/29/03	04/29/03	10/23/02	04/24/03	10/24/02	04/25/03
Sample Time			10:40	9:15	12:10	12:15	14:45	15:20	12:00	12:10
Sample Method			Conv	Conv	Conv	Conv	Conv	Conv	Conv	Conv
Metals (Method series 200)										
	<u>CAS RN</u>	<u>GWQS</u>								
Arsenic	7440-38-2	8	(3.4) U	10.6	(3.4) U	(3.4) U	13.9	4	13.9	12.1
Arsenic (Dissolved)	7440-38-2	8	(3.4) U	NA	(3.4) U	(3.4) U	NA	(3.4) U	NA	(3.4) U
Chromium	7440-47-3	100	NA	NA	NA	NA	95.6	NA	95.6	NA
Chromium (Dissolved)	7440-47-3	100	NA	NA	NA	NA	NA	NA	NA	NA
Lead	7439-92-1	10	NA	18.2	(2.2) U	(2.2) U	157	13.5	157	132
Lead (Dissolved)	7439-92-1	10	NA	NA	(2.2) U	(2.2) U	NA	(2.2) U	NA	(2.2) U

Field ID			MW39P	RW09	RW11		TH36	
Lab ID			386204	425485	385633	424936	386201	425478
Depth			93.5	57.8	64.8	60.9	67.1	63.6
Sample Date			10/24/02	04/30/03	10/23/02	04/28/03	10/24/02	04/29/03
Sample Time			12:05	15:00	10:13	16:10	16:55	10:20
Sample Method			Conv	LF	Conv	LF	Conv	Conv
Metals (Method series 200)								
	<u>CAS RN</u>	<u>GWQS</u>						
Arsenic	7440-38-2	8	12.6	(3.4) U	NA	NA	5	4.7
Arsenic (Dissolved)	7440-38-2	8	NA	3.7	NA	NA	NA	(3.4) U
Chromium	7440-47-3	100	86.1	NA	125	84.5	NA	NA
Chromium (Dissolved)	7440-47-3	100	NA	NA	NA	84.2	NA	NA
Lead	7439-92-1	10	166	(2.2) U	NA	NA	7.2	5.3
Lead (Dissolved)	7439-92-1	10	NA	(2.2) U	NA	NA	NA	(2.2) U

NOTES:

All results are reported in micrograms per liter (µg/L).

Depths are reported in feet (ft) below top of well casing.

Sample IDs ending in "P" indicate that it is a duplicate sample.

CAS_RN = Chemical Abstracts Service Registry Number

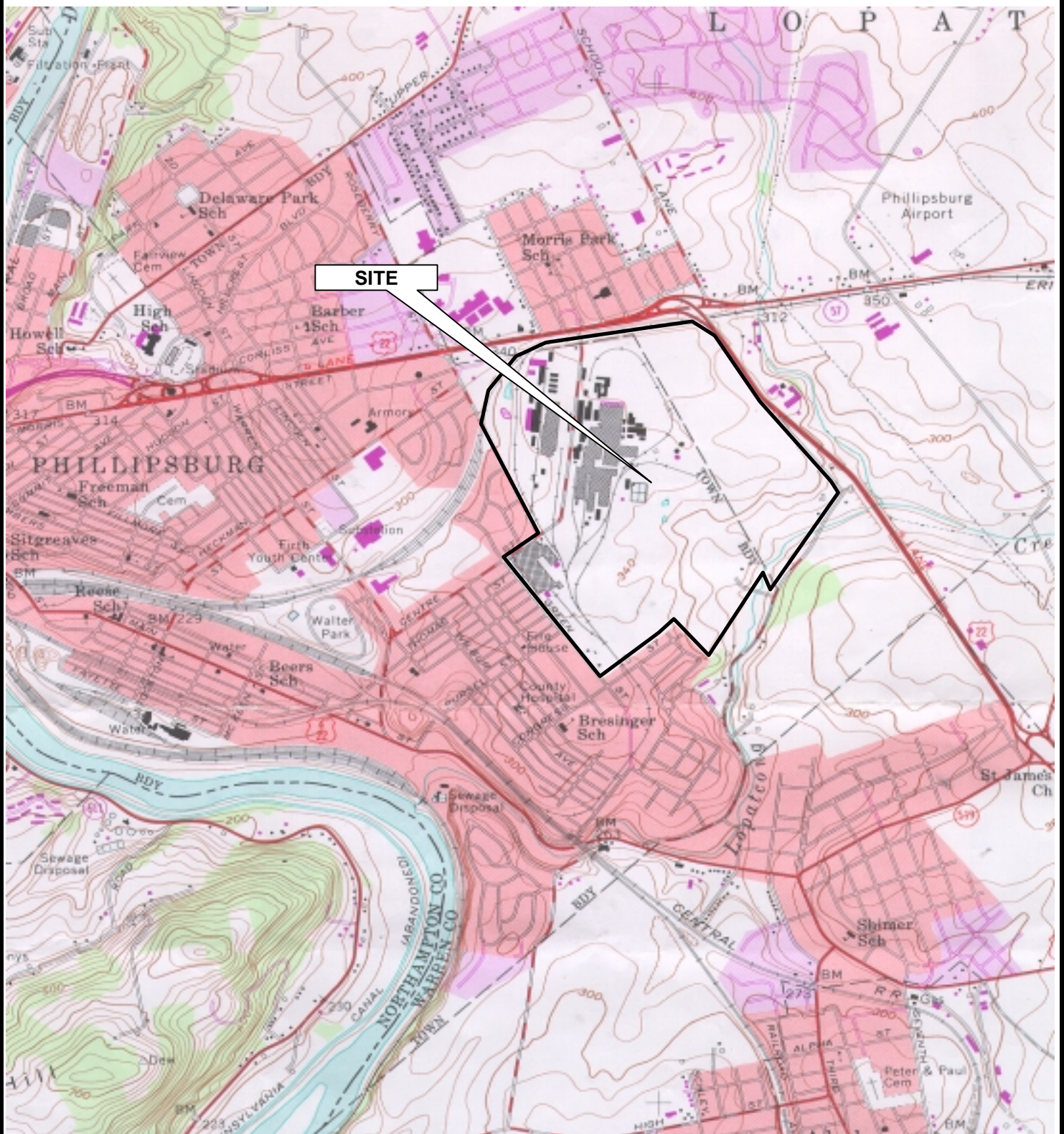
NJDEP GWQS = New Jersey Department of Environmental Protection Groundwater Quality Standards

U - Indicates that the analyte was not detected at the Method Detection Limit (MDL) shown in parenthesis.

Bold indicates that the concentration exceeds the NJDEP GWQS.

NA = Not Analyzed

FIGURES

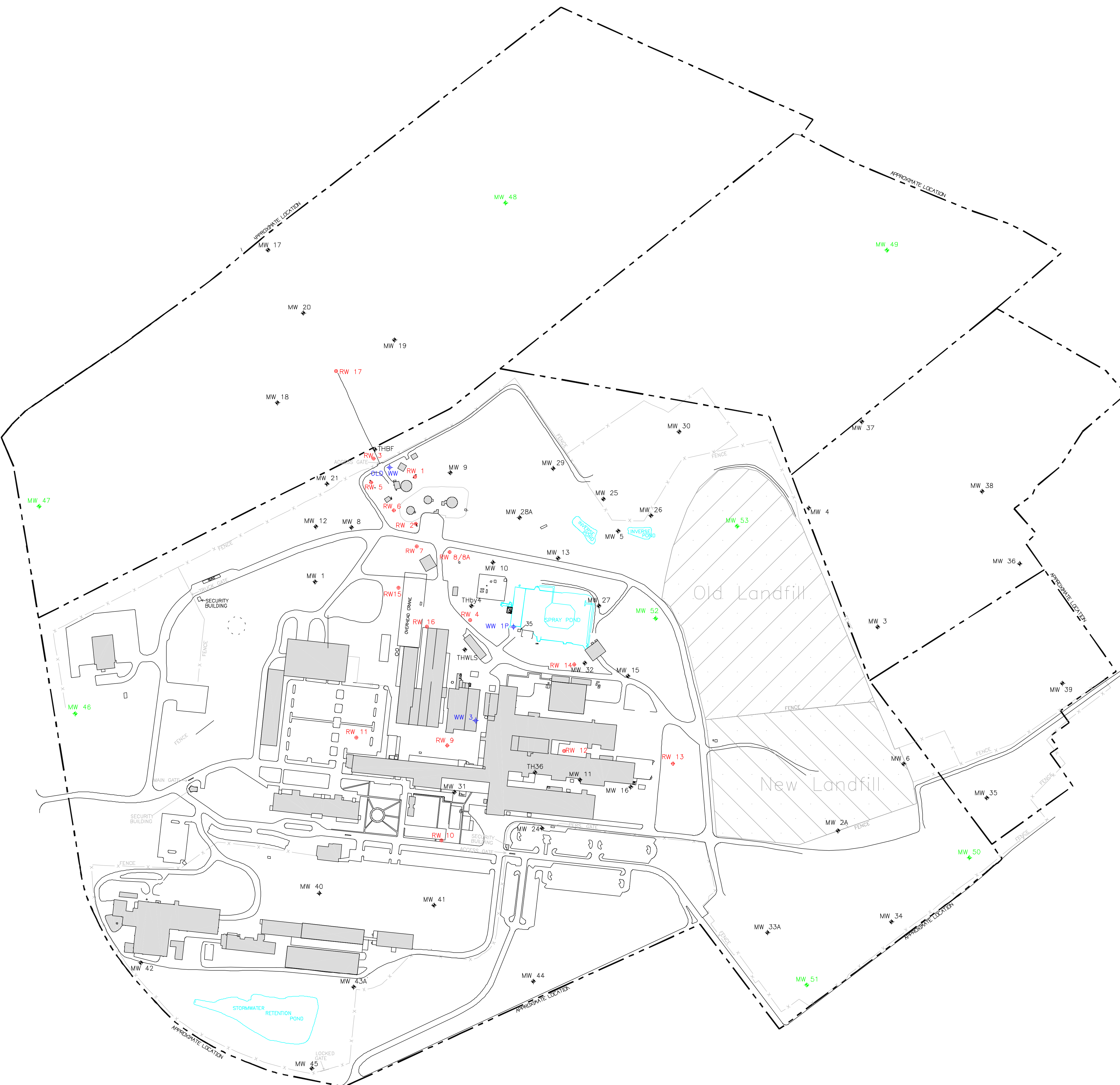


Source:
USGS 7.5' Topographic
Quadrangle - Easton, NJ-PA
1954 - Photorevised 1981

Client:
Ingersoll Rand Company
Design/Review: GM/CV
Scale: 1:24,000
Date: 04/22/03

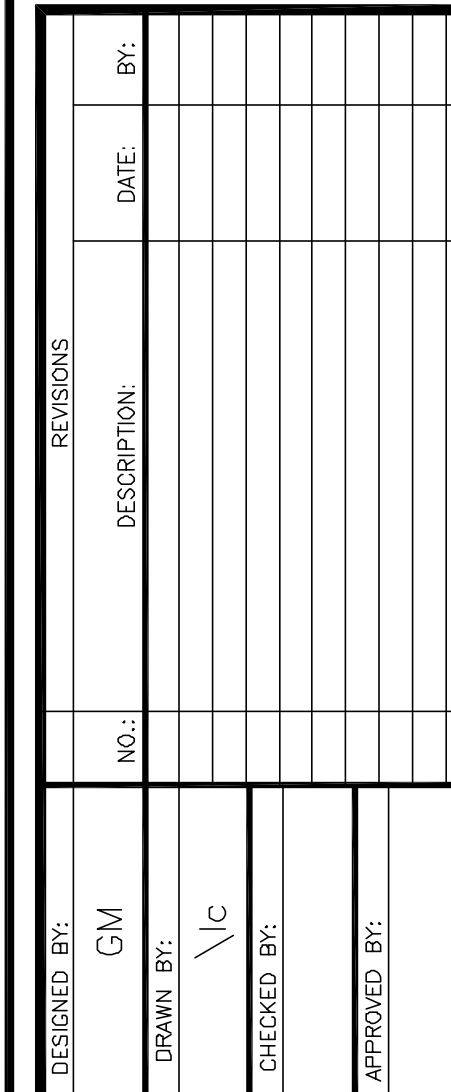
Figure Title:
FIGURE 1
USGS Site Location Map
Ingersoll-Rand - Phillipsburg, New Jersey
Project No.: 03710-156

ENSR
INTERNATIONAL



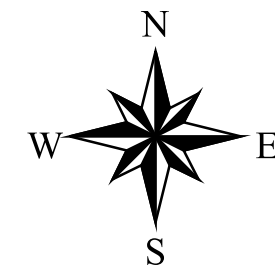
The diagram shows a rectangular area representing a landfill, divided into four quadrants by a diagonal line from the top-left to the bottom-right. A horizontal line below the landfill area represents a pond. Below the pond, there are four monitoring wells represented by colored circles with a cross inside: a black circle (Monitoring Well), a green circle (New Monitoring Well), a red circle (Recovery Well), and a blue circle (Production Well).

WELL LOCATIONS ARE APPROXIMATE.



SCALE:	DATE:	PROJECT NUMBER:
AS SHOWN	11/24/03	03710-156

2:



NOTES:
1 - This map was developed using New Jersey Department of Environmental Protection Geographic Information System Digital Data, but this secondary product has not been verified by NJDEP and is not state-authorized.
2 - Well locations are based on the Latitude/Longitude coordinates provided by NJDEP Bureau of Water Allocation. A cursory review of location data revealed large variation in accuracy. Several wells were plotted outside the extents of this map.

LEGEND

- Approximate Extent of Site
(Radial spacing interval = 1/4-mile)
- Rivers and Streams
- Streets and Highways
- Public Community Water Supply Wells

Well Use Codes

- | | |
|----------------------------|--------------------------|
| B - Boring | N - Public Non Community |
| D - Domestic | U - Non Public |
| E - Recovery/Decon | V - Gas Vent |
| G - Irrigation | X - Agricultural |
| I - Industrial | Z - Piezometer |
| M - Monitoring/Observation | 1 - Domestic |

0.25 0 0.25 0.5 0.75 Miles

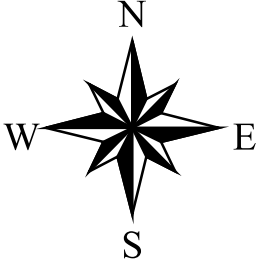
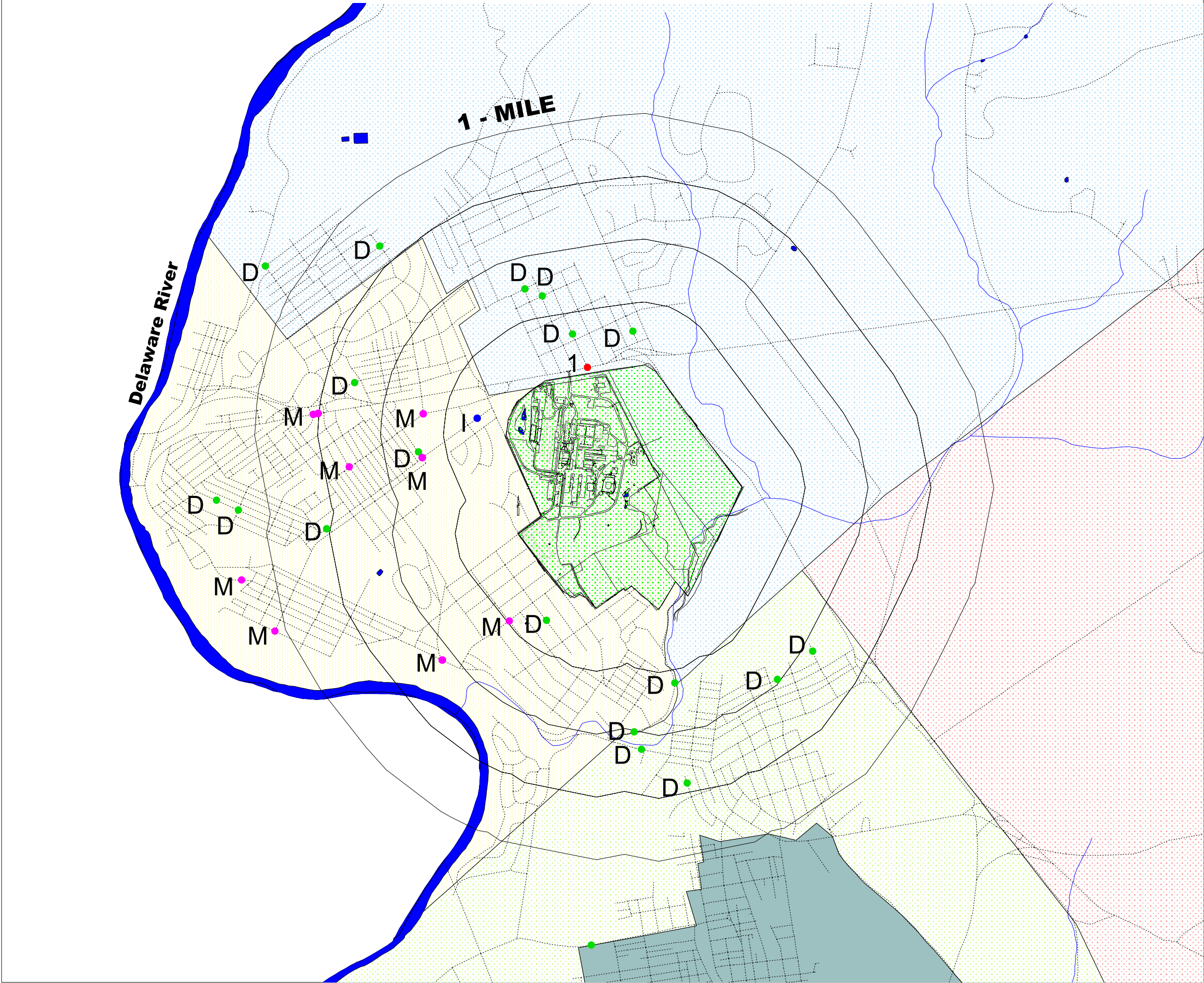
ENSR
International
281 Centennial Avenue
Piscataway, New Jersey 08854
Phone: (732) 457-0500
Fax: (732) 457-0550
Web: <http://www.ensr.com>

Figure 3

Well Search Summary Map

Ingersoll Rand Corp.
Phillipsburg, New Jersey

Design: GM	Date: 7/30/02	Checked: CV
Scale: 1:24,000	Project: 03710-153	Sheet: 1 of 1



NOTES:
1 - This map was developed using New Jersey Department of Environmental Protection Geographic Information System Digital Data, but this secondary product has not been verified by NJDEP and is not state-authorized.
2 - Well locations are based on the Latitude/Longitude coordinates provided by NJDEP Bureau of Water Allocation. A cursory review of location data revealed large variation in accuracy. Several wells were plotted outside the extents of this map.

LEGEND

- Approximate Extent of Site
(Radial spacing interval = 1/4-mile)
- Rivers and Streams
- Streets and Highways

Well Use Codes

- D - Domestic
- I - Industrial
- M - Monitoring/Observation
- 1 - Domestic



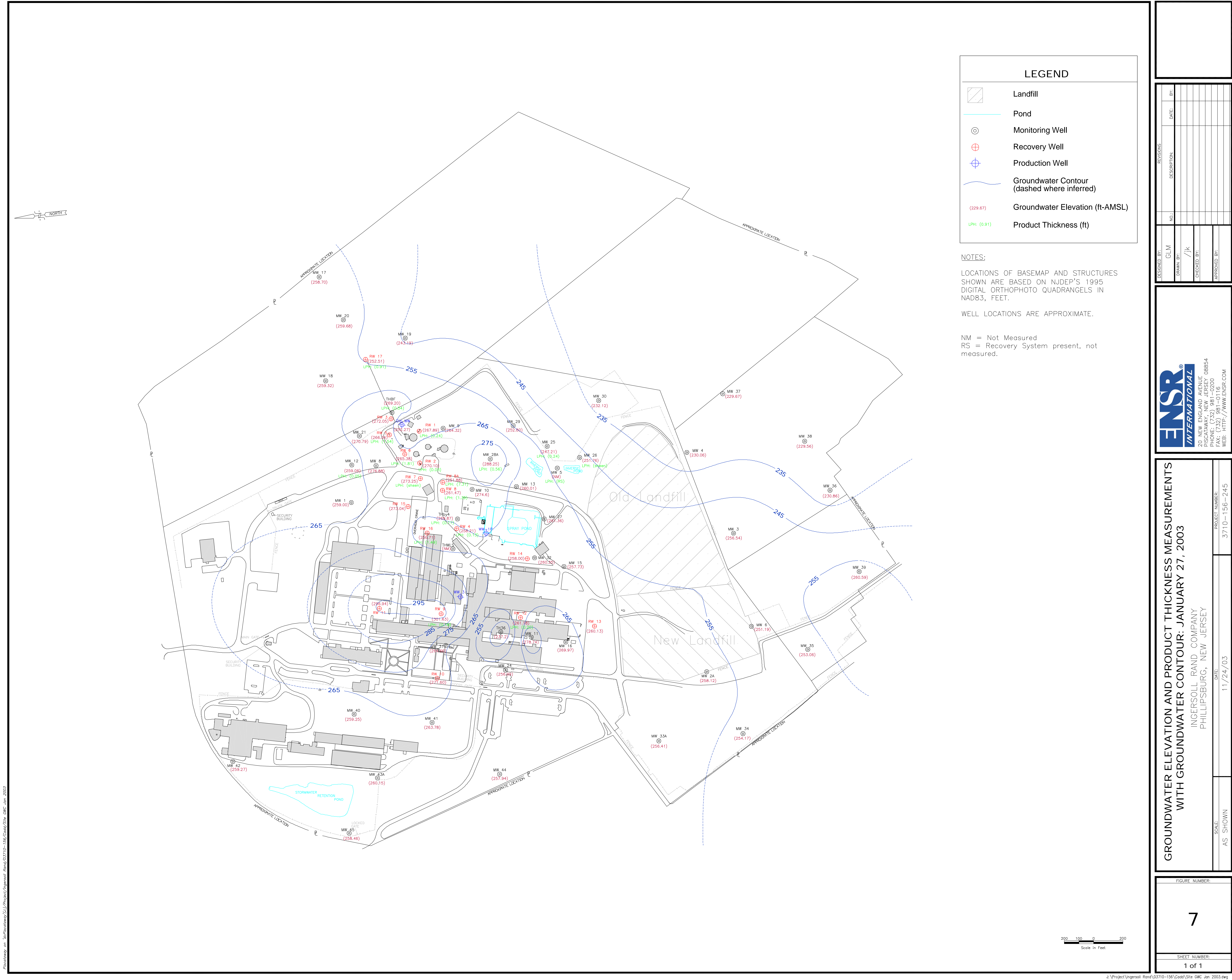
ENSR
International
20 New England Avenue
Piscataway, New Jersey 08854
Phone: (732) 981-0200
Fax: (732) 981-0116
Web: <http://www.ensr.com>

Figure 4

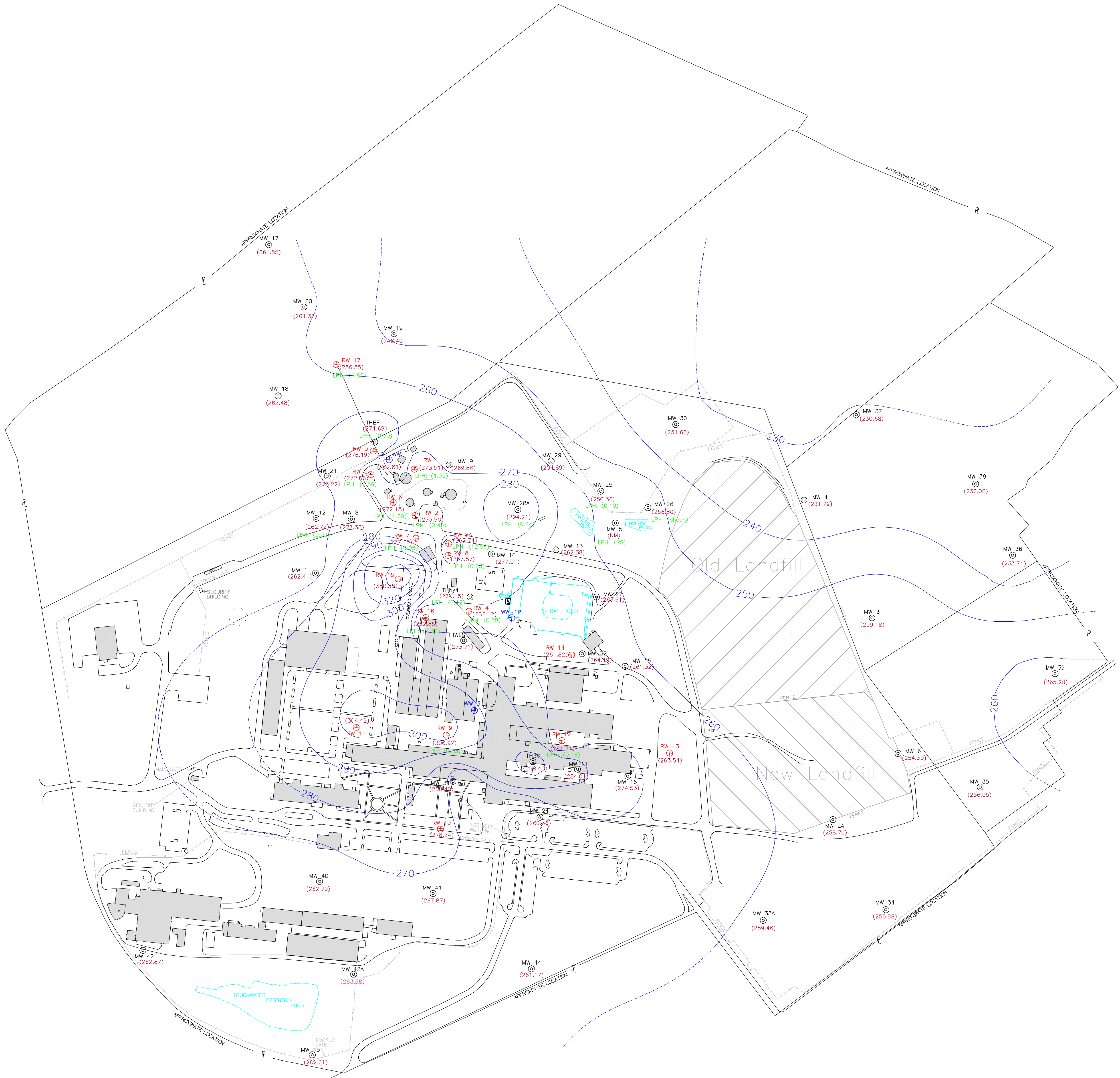
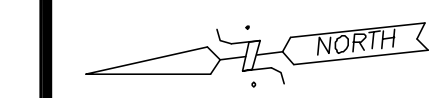
**Well Search Update
Address Rematch Map**
Ingersoll Rand Corp.
Phillipsburg, New Jersey

Design: GM	Date: 11/1/03	Checked: GM
Scale: 1:24,000	Project: 03710-156	Sheet 1 of 1

Plotted on 11/24/03 at 11:56 AM by J:\Project\Ingersoll Rand\03710-156\Cadd\Site GWC Jan 2003.dwg



Plotting on: J:\Projects\03710-156\Ingersoll Rand\03710-156\Drawings.dwg, Apr. 2003



200 100 0 200
Scale in Feet

LEGEND

- Landfill
- Pond
- Monitoring Well
- Recovery Well
- Production Well
- Groundwater Contour
(dashed where inferred)
- Groundwater Elevation (ft-AMSL)
(229.67)
- Product Thickness (ft)
LPH: (0.91)

NOTES:

LOCATIONS OF BASEMAP AND STRUCTURES SHOWN ARE BASED ON NJDEP'S 1995 DIGITAL ORTHOPHOTO QUADRANGLES IN NAD83, FEET.

WELL LOCATIONS ARE APPROXIMATE.

NM = Not Measured
RS = Recovery System present, not measured.

GROUNDWATER ELEVATION AND PRODUCT THICKNESS MEASUREMENTS WITH GROUNDWATER CONTOUR: APRIL 2003

INGERSOLL RAND COMPANY
PHILLIPSBURG, NEW JERSEY

PROJECT NUMBER:
3710-156-245

DATE:
11/04/03

SCALE:
AS SHOWN

FIGURE NUMBER:

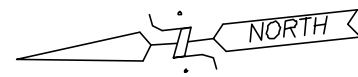
8

SHEET NUMBER:

1 of 1

ENSR
INTERNATIONAL
20 NEW ENGLAND AVENUE
PISCATAWAY, NEW JERSEY 08854
PHONE: (732) 381-0200
FAX: (732) 381-0116
WEB: HTTP://WWW.ENSRCOM

Plotting on 'd:\projects\ingersoll rand\03710-156\Code\Site GWC July 2003\1'.



LEGEND

Landfill

Monitoring Well

Recovery Well

Production Well

Pond

Groundwater Contour (Dashed where Inferred)

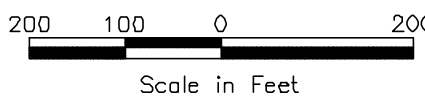
Approximate Property Boundary

Groundwater Elevation (ft-AMSL)

Product Thickness (ft)

= NOT MEASURED

NOTES:
LOCATIONS OF BASEMAP AND STRUCTURES SHOWN ARE BASED ON NJDEP'S 1995 DIGITAL ORTHOPHOTO QUADRANGLES IN NAD83, FEET.
WELL LOCATIONS ARE APPROXIMATE.



GROUNDWATER ELEVATION AND PRODUCT THICKNESS MEASUREMENTS
WITH GROUNDWATER CONTOUR: JULY 2003

INGERSOLL RAND COMPANY
PHILIPSBURG, NEW JERSEY

ENSR

INTERNATIONAL

20 NEW ENGLAND AVENUE
PHILIPSBURG, NEW JERSEY 08854
TEL: (732) 281-1600
FAX: (732) 281-0116
WEB: HTTP://WWW.ENSRCOM

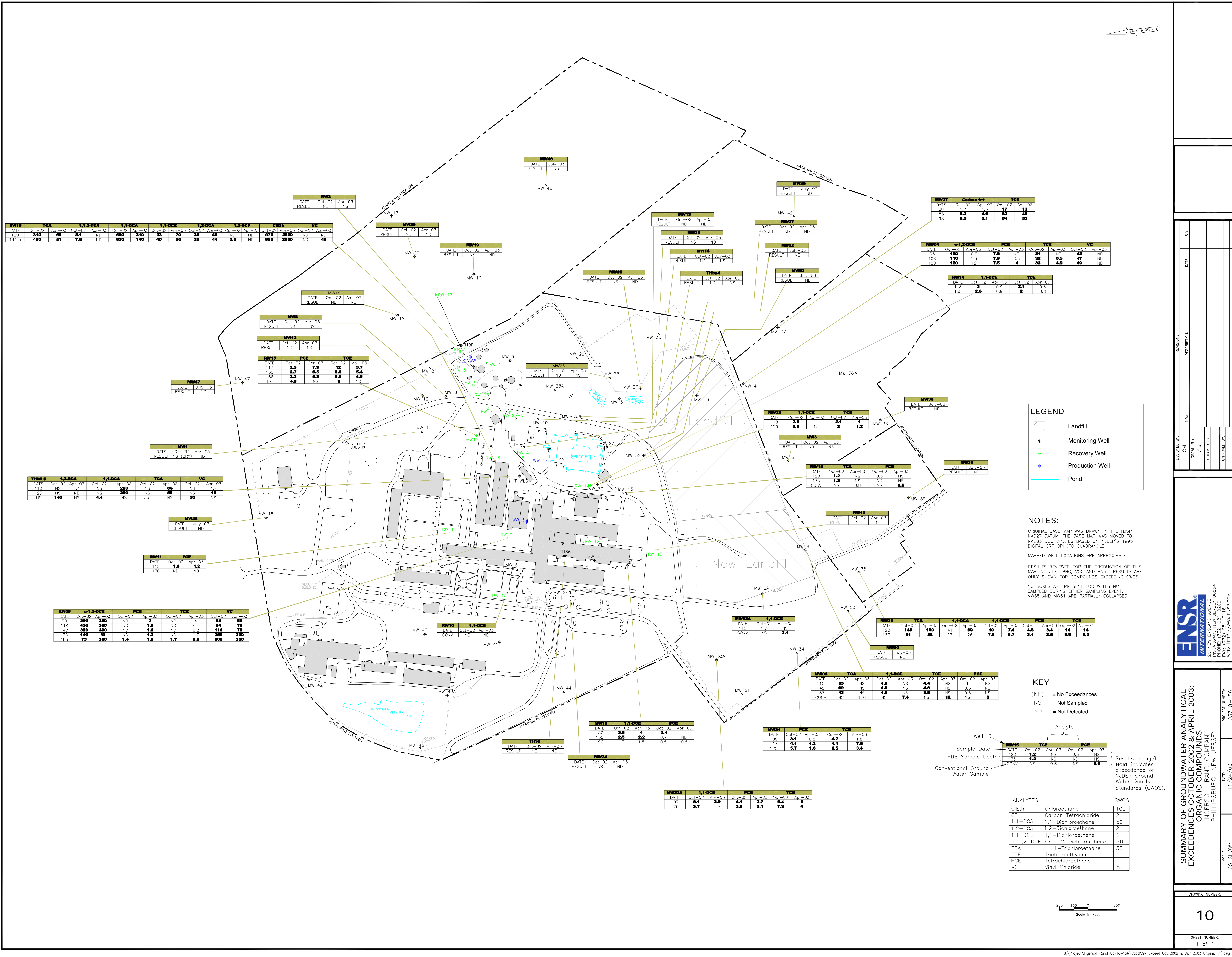
DESIGNED BY:	GM	NO.	DESCRIPTION	DATE:	BY:
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APPENDICES

APPENDIX A

WELL INSTALLATION LOGS

APPENDIX B

LANDFILL DISRUPTION PERMIT

APPENDIX C

VARIANCE REQUEST

APPENDIX D

MID-ATLANTIC GEOPHYSICAL REPORT

APPENDIX E

LABORATORY ANALYTICAL DATA REPORTS AND EDD
(HARD COPY REPORTS INCLUDED IN NJDEP SUBMISSION ONLY)

APPENDIX F

GROUNDWATER PURGING AND SAMPLING LOGS